

1.0 GENERAL

- 1.1 THESE NOTES SHALL BE APPLICABLE TO ALL THE STRUCTURAL DRAWINGS THROUGHOUT THE PROJECT.
- 1.2 THESE NOTES AND STRUCTURAL DRAWINGS SHALL NOT BE USED FOR ANY PURPOSE/ PROJECT OTHER THAN SPECIFIED, WITHOUT PRIOR WRITTEN PERMISSION OF THE COMPETENT AUTHORITY.
- 1.3 ALL DRAWINGS OF ARCHITECTURAL, STRUCTURAL, ELECTRICAL, SANITARY, PLUMBING ETC., FORMING PART OF THE CONTRACT SHALL BE READ IN CONJUNCTION WITH EACH OTHER.
- 1.4 ALL STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH RELEVANT INDIAN STANDARDS AND OTHER CONTRACT CONDITIONS & PROVISIONS. THE CONTRACTOR AND EXECUTIVES SHALL CAREFULLY CHECK IN ADVANCE ALL THE DRAWINGS PRIOR TO COMMENCEMENT OF THE WORK. IN CASE ANY DISCREPANCY/ AMBIGUITY OBSERVED, THE SAME SHALL BE BROUGHT TO THE NOTICE OF THE COMPETENT AUTHORITY FOR DECISIONS/ CLARIFICATIONS.
- 1.5 ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
- 1.6 NO DIMENSIONS SHALL BE SCALED FROM STRUCTURAL DRAWINGS. ONLY FIGURED DIMENSIONS SHALL BE FOLLOWED. ANY MISSING DETAILS/ DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF THE COMPETENT AUTHORITY FOR CLARIFICATIONS. THE CONTRACTOR AND EXECUTIVES SHALL CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
- 1.7 IN CASE OF DISCREPANCY/ AMBIGUITY IN DETAILS GIVEN IN STRUCTURAL DRAWINGS AND ARCHITECTURAL DRAWINGS/ TD DRAWINGS/ SERVICES DRAWINGS (ELECTRICAL, SANITARY, PLUMBING ETC.), THE DETAILS GIVEN IN STRUCTURAL DRAWING SHALL SUPERSEDE.
- 1.8 THE RELEVANT INDIAN STANDARDS WHEREVER REFERRED/ APPLICABLE TO THE PROJECT SHALL BE THE LATEST EDITIONS OF IS CODES AND SPECIAL PUBLICATIONS, NATIONAL BUILDING CODE, IRC CODES AND PUBLICATIONS ETC., WITH ALL ERRATA AND AMENDMENTS AS ON THE DATE OF ISSUE OF THE CONTRACT.
- 1.9 NO EXCAVATIONS/ BORINGS/ FILLINGS IN THE CLOSE VICINITY OF STRUCTURE, STRUCTURAL ALTERATIONS OR CHANGE IN LOADING CONDITIONS ON STRUCTURE, WHICH MAY AFFECT THE DESIGN OF STRUCTURE, SHALL BE CARRIED OUT WITHOUT PRIOR WRITTEN PERMISSION OF THE COMPETENT AUTHORITY.

2.0 MATERIALS AND WORKMANSHIP

- 2.1 ALL THE MATERIALS USED IN CONSTRUCTION SUCH AS CEMENT, REINFORCEMENT STEEL, COARSE AGGREGATE, FINE AGGREGATE, WATER, CHEMICALS & ADMIXTURES, STRUCTURAL STEEL, BRICKS ETC., SHALL BE OF GOOD QUALITY & CONFORMING TO RELEVANT INDIAN STANDARDS. ALL NECESSARY TESTING OF MATERIAL SHALL BE CONDUCTED AS SPECIFIED IN CONTRACT AGREEMENT AND RELEVANT INDIAN STANDARDS BEFORE INCORPORATION OF THE MATERIAL AND DURING EXECUTION.
- 3.0 CEMENT
- 3.1 THE TYPE OF CEMENT FOR ALL RCC /PCC/ OTHER BUILDING WORKS SHALL BE AS SPECIFIED IN CONTRACT/ DRAWINGS AND SHALL CONFIRM TO RELEVANT INDIAN STANDARDS AS UNDER
- (a) 43 GRADE ORDINARY PORTLAND CEMENT CONFORMING TO IS-8112 SHALL BE USED FOR RCC WORK AND FOR MASONRY AND PLASTERING.
- (b) ~~43 GRADE~~ PPC CONFORMING TO IS-1489 CAN BE USED FOR MASONRY AND PLASTERING .
- (c) FOR PILES AND PILE CAPS REFER PILING NOTES IN DRAWING NO. CEVZ/WD/2110 (S) SA/CH/DP, SHT NO:- 5/20

- 3.2 TESTS FOR COMPRESSIVE STRENGTH, INITIAL SETTING TIME, FINAL SETTING TIME, SOUNDNESS, FINENESS ETC., SHALL BE CONDUCTED FOR THE CEMENT AS PER IS-4031. THE CEMENT SHALL BE TESTED AT AN INTERVAL OF NOT EXCEEDING SIX MONTHS OR WHENEVER THERE IS CHANGE IN SOURCE OF CEMENT. ALL TEST RESULTS SHALL BE TREATED AS EXPIRED AFTER A LAPSE OF SIX MONTHS FROM THE DATE OF TEST.

4.0 WATER

- 4.1 WATER USED IN CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF CLAUSE 5.4 OF IS-456.
- 4.2 POTABLE WATER IS GENERALLY CONSIDERED SATISFACTORY FOR MAKING OF CONCRETE.THE pH-VALUE OF WATER SHALL BE GENERALLY NOT LESS THAN 6 (SIX).
- 4.3 SOURCES OF WATER SHALL BE TESTED FOR ITS SUITABILITY.
- 4.4 THE SUITABILITY OF WATER FOR MANUFACTURING CONCRETE AND CURING ETC., SHALL BE APPROVED BY THE ENGINEER-IN-CHARGE BEFORE COMMENCEMENT OF WORK AT SITE AND LATER WHENEVER THERE IS A CHANGE IN THE SOURCE OF WATER USED.

5.0 AGGREGATES

- 5.1 COARSE AGGREGATE SHALL BE FROM NATURAL SOURCE AND SHALL CONSIST OF CRUSHED STONE OR NATURALLY AVAILABLE RIVER GRAVEL OR COMBINATION OF THESE CONFORMING TO IS-383. NATURALLY AVAILABLE RIVER GRAVEL MAY BE USED FOR PCC ONLY IF PERMITTED BY ENGINEER-IN-CHARGE.
- 5.2 THE NOMINAL MAXIMUM SIZE OF COARSE AGGREGATE SHALL NOT BE GREATER THAN ONE FOURTH OF THE MINIMUM DIMENSION OF THE MEMBER UNLESS OTHERWISE SPECIFIED. FOR REINFORCED CONCRETE MEMBERS OF THICKNESS MORE THAN 80 MM, 20 MM NOMINAL SIZED AGGREGATE MAY BE USED.

6.0 ADMIXTURES

- 6.1 ADMIXTURES USED IN CONCRETE SHALL COMPLY WITH THE REQUIREMENTS OF CLAUSE 5.2 & 5.5 OF IS-456.
- 6.2 THE QUANTITY OF POZZOLANA AND SLAG SHALL NOT EXCEED THE LIMITS SPECIFIED IN IS-1489 (PART-1) AND IS-455 RESPECTIVELY.

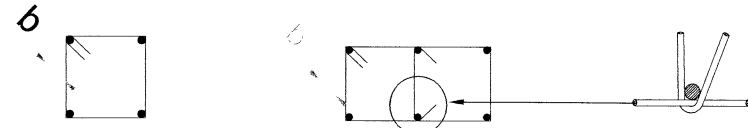
7.0 REINFORCEMENT AND DETAILING

- 7.1 THE TYPE OF REINFORCEMENT STEEL FOR ALL RCC WORKS SHALL HAVE CORROSION RESISTANCE PROPERTIES AND AS SPECIFIED IN CONTRACT/ DRAWINGS AND SHALL CONFORM TO RELEVANT INDIAN STANDARDS AS UNDER
- 7.2 ALL REINFORCEMENT FABRICATION AND ASSEMBLY IN RCC WORKS SHALL BE CORRECTLY DONE AS PER DETAILS GIVEN IN THE STRUCTURAL DRAWINGS. IT SHALL BE FABRICATED IN CONFORMITY WITH IS-2502, IS-5525 AND CLAUSE 12 OF IS-456.
- 7.3 ALL REINFORCEMENT BEFORE PLACEMENT AND ASSEMBLY SHALL BE MADE FREE FROM LOOSE MILL SCALES, RUST, COATS OF PAINTS, OIL, MUD OR ANY OTHER SUBSTANCE WHICH MAY DESTROY OR REDUCE BOND. SAND BLASTING OR OTHER TREATMENT IS RECOMMENDED TO CLEAN THE REINFORCEMENT.
- 7.4 A RE-BAR ONCE BENT, HOOKED OR CRANKED SHALL NOT BE STRAIGHTENED AND USED AGAIN.
- 7.5 BAR BENDING SCHEDULE SHALL BE PREPARED FOR ALL REINFORCEMENT WORKS BEFORE PLACING OF THE REINFORCEMENT.

- 7.6 REINFORCEMENT DETAILING SHALL BE DONE IN ACCORDANCE WITH IS-456 AND SP-34 OF INDIAN STANDARDS EXCEPT AS MODIFIED BY THE PROVISIONS OF IS-13920 FOR SEISMIC ZONES- III, IV & V. (REFER STRUCTURAL STANDARD DRAWING. ISC/CE(N)/DU/02-21/TD/01, SHT. 2&3).
- 7.7 IT SHALL BE ENSURED THAT WHILE CONCRETING, THE BARS ARE NOT DISPLACED OR DISTURBED FROM POSITION DUE TO MOVEMENT OF WORKERS/ EQUIPMENT ETC. ADEQUATE TEMPORARY WORKING PLATFORM SHALL BE PROVIDED FOR WORKERS/EQUIPMENT. SPECIAL CARE SHALL BE TAKEN IN CASE OF CANTILEVER BEAMS AND SLABS.
- 8.0 NOMINAL COVER
- 8.1 ADEQUATE COVER SHALL BE MAINTAINED FOR ALL RCC MEMBERS BY ATTACHING SUITABLE COVER BLOCKS TO RE-BARS. THE NOMINAL COVER (MINIMUM CLEAR COVER) FOR ALL RE-BARS INCLUDING STIRRUPS/ TIES FOR DIFFERENT MEMBERS SHALL BE AS FOLLOWS:

CLEAR COVER FOR STRUCTURAL ELEMENTS	BOTTOM	SIDES	TOP
a) PILE	100MM	60MM	-
b) PILE CAP	75MM	75MM	75MM
c) COLUMN & SHEAR WALL	-	45MM	-
d) SHEAR WALL UPTO 200MM WIDTH	-	30MM	-
e) BEAM	40MM	40MM	40MM
f) SLAB	30MM	30MM	30MM
g) LINTEL & STAIRS	30MM	30MM	30MM

- 8.2 THE STIRRUPS, TIES AND LINKS IN ALL BEAMS AND COLUMNS SHALL BE PROVIDED AS FOLLOWS:



BENT LENGTH b≈8 TIMES D OR 75 MM (WHICHEVER IS LARGER) WHERE D= BAR DIA OF STIRRUPS, TIES & LINKS.

9.0 JOINTS/ SPLICES

- 9.1 LAP SPLICES SHALL NOT BE USED FOR BARS LARGER THAN 36MM DIA, FOR LARGER DIAMETERS, BARS MAY BE WELDED. IN CASE WHERE WELDING IS NOT PRACTICABLE LAPPING OF BAR LARGER THAN 36 MM MAY BE PERMITTED IN WHICH ADDITIONAL SPIRALS SHALL BE PROVIDED AROUND THE LAPPED BAR.
- 9.2 THE DEVELOPMENT LENGTH FOR FE 500 STEEL AND M30 CONCRETE SHALL BE 46 TIMES DIA OF BAR IRRESPECTIVE OF POSITION OF THE BAR i.e. IN COMPRESSION / TENSION FOR ANY OTHER COMBINATION. DEVELOPMENT LENGHT AS SPECIFIED IN CLAUSE NO - 26.2.1 OF IS 456 : 2000 SHALL BE FOLLOWED. INCASE OF PILES AND PILE CAPS DEVELOPMENT LENGTH SHALL BE AS SPECIFIED IN PILING NOTES GIVEN IN DRAWING NO:- CEVZ/WD/2110 (S) SA/CH/DP, SHT NO:- 5/20
- 9.3 CHAIRS OF 12MM SHALL BE PROVIDED 1 NO PER 1 SQM TO SUPPORT TOP REINFORCEMENT IN SLABS .
- 9.4 25MM DIA SPACER BARS AT 1000MM C/C ARE TO BE PROVIDED WHERE REINFORCEMENT IN BEAMS IS PROVIDED IN TWO LAYERS .

10.0 PLACING

- 10.1 UNLESS OTHERWISE SPECIFIED THE REINFORCEMENT SHALL BE PLACED WITHIN THE FOLLOWING TOLERANCES :- FOR EFFECTIVE DEPTH UP TO 200MM± 10MM. FOR EFFECTIVE DEPTH MORE THAN 200MM± 15MM.
- 10.2 TO MAINTAIN THE SPECIFIED NOMINAL COVER TO STEEL REINFORCEMENT SPACER/COVER BLOCK OF PVC OR CONCRETE OF SAME STRENGTH SHALL BE USED. SPACER/COVER SHALL BE PLACED AT A MAXIMUM SPACING OF 01 (ONE) METER.
- 11.0 FORM WORK

TPY OF FORM WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
VERTICAL FORMWORK TO COLUMNS, WALLS & BEAMS.	24 HOURS
SOFFIT FORMWORK TO SLABS (PROPS TO BE RE-FIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK)	3 DAYS
SOFFIT FORMWORK TO BEAM (PROPS TO BE RE-FIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK)	7 DAYS
PROPS TO SLABS:- (i) SPANNING UPTO 4.5 M (ii) SPANNING OVER 4.5 M	7 DAYS 14 DAYS
PROPS TO BEAMS AND ARCHES:- (i) SPANNING OVER 4.5 M (ii) SPANNING OVER 6.0 M	14 DAYS 21 DAYS

12.0 MAXIMUM CEMENT CONTENT

- 12.1 OTHER REQUIREMENTS FOR DURABILITY SHALL BE ENSURED IN ACCORDANCE WITH CLAUSE 8.2 OF IS-456.

13.0 PLACING AND COMPACTION :- PLACING

- 13.1 THE SCHEME OF CONCRETE PLACING SHALL BE APPROVED BY THE GE. IT SHALL BE ENSURED THAT DURING CONCRETING THERE IS NO SEGREGATION OF ITS CONSTITUENTS.
- 13.2 AS FAR AS POSSIBLE ALL CONCRETING SHALL BE DONE IN ONE OPERATION UP TO THE PRE-DECIDED STAGE AS PER CLAUSE 13.4 OF IS-456. CONCRETE ONCE PLACED AND COMPACTED SHALL NOT BE DISTURBED OR REMOULDED
- 13.3 IN CASE OF BEAMS, CONCRETE SHALL BE PLACED STARTING FROM SUPPORTS AND CONTINUED TOWARDS MID SPAN.
- 13.4 IN CASE OF CANTILEVERS, CONCRETE SHALL BE PLACED STARTING AT THE FIXED END, MOVING TOWARDS FREE END.
- 13.5 THE VERTICAL LIFT FOR RCC WALLS AND RIBS OF DEEP BEAMS SHALL NOT BE MORE THEN 900 MM AND THAT FOR COLUMNS 1200 MM. THE HEIGHT OF FORM WORK AT THE POURING FACE SHALL BE RESTRICTED TO AVOID SEGREGATION OF CONCRETE DURING POURING AND FOR EASE OF COMPACTION.
- 13.6 ANY PIPE, DUCT OR ANY OTHER FIXTURE TO BE FIXED OR TAKEN THROUGH A RCC/PCC MEMBER SHALL BE INITIALLY PLACED IN POSITION OR NECESSARY PROVISIONS FOR THE SAME SHALL BE MADE BEFORE CONCRETING. CONCRETE ONCE CAST AND HARDENED SHALL NOT BE BROKEN/DAMAGED/ DISTURBED/REMOULDED TO PROVIDE OPENINGS FOR PIPES OR OTHER FIXTURES ETC.
- 13.7 IN CASE ADJOINING MEMBER IS HAVING DIFFERENT GRADE OF CONCRETE, THE RICHER CONCRETE SHALL BE PLACED AND COMPACTED FIRST BY CONTAINING THE CONCRETE WITH THE HELP OF STOP BOARDS.

14.0 PLACING AND COMPACTION : COMPACTION

- 14.1 ALL CONCRETE FOR RCC WORK SHALL BE COMPACTED USING APPROPRIATE TYPE OF VIBRATORS, SO AS TO ACHIEVE DENSE AND COMPACT CONCRETE AROUND REINFORCEMENT OR ANY EMBEDDED FIXTURE AND TO THE SIDE OF FORM WORK. VIBRATORS FOR COMPACTION OF CONCRETE SHALL COMPLY WITH THE REQUIREMENTS IF IS-2505, IS-2508, IS-2514 AND IS-4656.
- 14.2 OVER VIBRATION MAY LEAD TO SEGREGATION OF CONCRETE AND UNDER VIBRATION MAY NOT GIVE THE NECESSARY COMPACTION AND THEREFORE SHALL BE AVOIDED. PROPER VIBRATION TO ACHIEVE A DENSE AND VOID FREE CONCRETE SHALL BE ENSURED.
- 14.3 VIBRATORS SHALL NOT BE USED TO SHIFT THE CONCRETE MASS, AS IT SHALL RESULT IN SEGREGATION. CONCRETE ONCE LAID AND COMPACTED SHALL NOT BE DISTURBED OR REMOULDED.
- 15.0 WORKABILITY
- 15.1 THE CONCRETE MIX PROPORTIONS CHOSEN SHALL BE SUCH THAT THE CONCRETE IS OF ADEQUATE WORKABILITY FOR THE PLACING CONDITIONS OF THE CONCRETE AND CAN PROPERLY BE COMPACTED WITH THE MEANS AVAILABLE. SUGGESTED RANGES OF WORKABILITY OF CONCRETE MEASURED IN ACCORDANCE WITH IS-1199 ARE GIVEN BELOW.

S. NO	STRUCTURAL MEMBER	SLUMP
1.	SLAB (INCLUDING CHHAJJA), BEAMS (INCLUDING LINTELS) COLUMNS, PEDESTALS AND RETAINING WALLS (LIGHTLY REINFORCED SECTIONS)	25-75
2.	-DO- (HEAVILY REINFORCED SECTIONS)	50-100
3.	IN-SITU PILING AND TRENCH FILL	150-180
4.	TREMIE CONCRETE	AS PER IS-9103

NOTES:- STATUS OF REINFORCEMENT AS LIGHT/HEAVY AND THE FLOW OF CONCRETE AS PER IS-9103 SHALL BE DECIDED BY GE, AS PER SITE REQUIREMENTS.

16.0 CURING

- 16.1 EXPOSED SURFACES OF CONCRETE SHALL BE CURED ADEQUATELY IN ACCORDANCE WITH CLAUSE 13.5.1 OF IS- 456.
- 16.2 MEMBRANE CURING:- MEMBRANE CURING SHALL BE RESORTED TO IN THE WORST CONDITION OF NON-AVAILABILITY OF WATER. APPROVED CURING COMPOUNDS MAY BE USED IN LIEU OF MOIST CURING WITH THE PERMISSION OF THE GARRISON ENGINEER. SUCH COMPOUNDS SHALL BE APPLIED TO ALL EXPOSED SURFACES OF THE CONCRETE AS SOON AS POSSIBLE AFTER THE CONCRETE HAS SET. IMPERMEABLE MEMBRANES SUCH AS POLYETHYLENE SHEETING COVERING CLOSELY THE CONCRETE SURFACE MAY ALSO BE USED TO PROVIDE EFFECTIVE BARRIER AGAINST EVAPORATION.
- 16.3 MOIST CURING :- EXPOSED SURFACES OF CONCRETE SHALL BE KEPT CONTINUOUSLY IN A DAMP OR WET CONDITION BY PONDING OR BY COVERING WITH A LAYER OF CANVAS, HESSIAN OR SIMILAR MATERIALS AND KEPT CONSTANTLY WET FOR AT LEAST 07 (SEVEN) DAYS FROM THE DATE OF PLACING CONCRETE, IN CASE OF ORDINARY PORTLAND CEMENT AND AT LEAST 10 (TEN) DAYS WHERE MINERAL ADMIXTURES OR BLENDED CEMENTS ARE USED. FOR CONCRETE EXPOSED TO HOT AND DRY WEATHER CONDITIONS, THE PERIOD OF CURING SHALL NOT BE LESS THAN 10 (TEN) DAYS AND AT LEAST 14 (FOURTEEN) DAYS WHERE MINERAL ADMIXTURES OR BLENDED CEMENTS ARE USED.
- 16.4 REQUIREMENT OF MEMBRANE CURING OR ANY OTHER SPECIAL CURING, WHEREVER REQUIRED SHALL BE SEPARATELY SPECIFIED IN THE CONTRACT.
- 16.5 FOR THE CONCRETE CONTAINING PORTLAND POZZOLANA CEMENT, PORTLAND SLAG CEMENT OR MINERAL ADMIXTURE, PERIOD OF CURING MAY BE INCREASED BY GE SUITABLY BASED ON COMPRESSIVE STRENGTH ACHIEVED BY 07(SEVEN) DAYS BY SAMPLE CUBES.

17.0 MASONRY WORK

- 17.1 PCC BLOCKS OF GRADE C-5 CONFORMING TO IS 2185:2005 SHALL BE USED.
- SIZE OF BLOCK (LENGTH/HEIGHT/WIDTH) : 1)400/200/200 2)500/200/200 3)600/200/200 4)400/100/200 5)500/100/200 6)600/100/200.

PANEL WALLS

- 17.2 ALL WALLS ARE NON LOAD BEARING WALLS AND THESE SHALL BE CONSTRUCTED ONLY AFTER RCC FRAMED STRUCTURE IS COMPLETED AND THE CONSTRUCTION OF WALLS SHALL BE CARRIED OUT AS PER RELEVANT INDIAN STANDARDS
- 17.3 MASONRY PANEL WALLS SHALL BE CONSTRUCTED AS SPECIFIED IN CONTRACT AGREEMENT AND ALL AS PER RELEVANT INDIAN STANDARDS UNLESS OTHERWISE MENTIONED IN CONTRACT DRAWINGS. THE MIX OF MORTAR SHALL BE CM (1 : 6) FOR WALLS 200 MM THICK OR MORE AND CM (1 : 4)FOR LESS THAN 200 MM THICK WALLS.
- 17.4 THE VERTICAL FACE OF CONCRETE AT THE JUNCTION OF WALL AND RCC MEMBER SHALL BE RAKED TO GIVE A ROUGH SURFACE. CM (1: 4) MORTAR AT THIS JUNCTION SHALL BE APPLIED AS THE WORK PROCEEDS SO AS TO DEVELOP PROPER BOND BETWEEN WALL AND RCC MEMBER.
- 17.5 A GAP OF 10MM SHALL BE LEFT BETWEEN THE SOFFIT OF RCC BEAMS/SLAB AND TOP OF PANEL WALL, WHICH SHALL BE FILLED UP WITH LEAN MORTAR CM (1:8).
- 17.6 ALL OPENINGS FOR DOORS/WINDOWS OR OTHERWISE IN PANEL WALLS SHALL HAVE LINTELS AS PER TYPICAL DETAILS UNLESS THE STRUCTURAL DRAWINGS PROVIDE FOR RCC LINTEL BEAMS.
- 17.7 WHEREVER VARIATION IN HEIGHT OF MASONRY IS LESS THAN ONE BRICK THICKNESS, IT SHALL BE MADE GOOD WITH PCC M-15 (NOMINAL MIX).

NOTE :-

1. ALL DIMENSION ARE IN MM UNLESS OTHERWISE SPECIFIED.
2. FIGURED DIMENSIONS ONLY SHALL BE FOLLOWED.
3. ALL DRGS. ARE IN CONJUNCTION WITH ALL ARCHITECTURAL AND STRUCTURAL DRGS

S.NO.	DATE	DESCRIPTION	INITIAL

REVISIONS

CLIENT:	CHIEF ENGINEER(NAVY) VISAKHAPATNAM ZONE	SHT NO: 1/20
REF. DRG. NO: CEVZ/2022/WD/2110 (S) - SA/CH/DH		

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NAME OF PROJECT:
PROVISION OF DEFICIENT 287 SINGLE
INLIVING ACCN ASSOCIATED
FACILITIES FOR DSC AT NAVAL
DOCKYARD, VISAKHAPATNAM
(BD NO AMWP 46/2020)

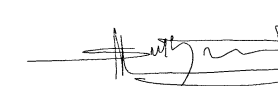
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STRUCTURAL GENERAL NOTES


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