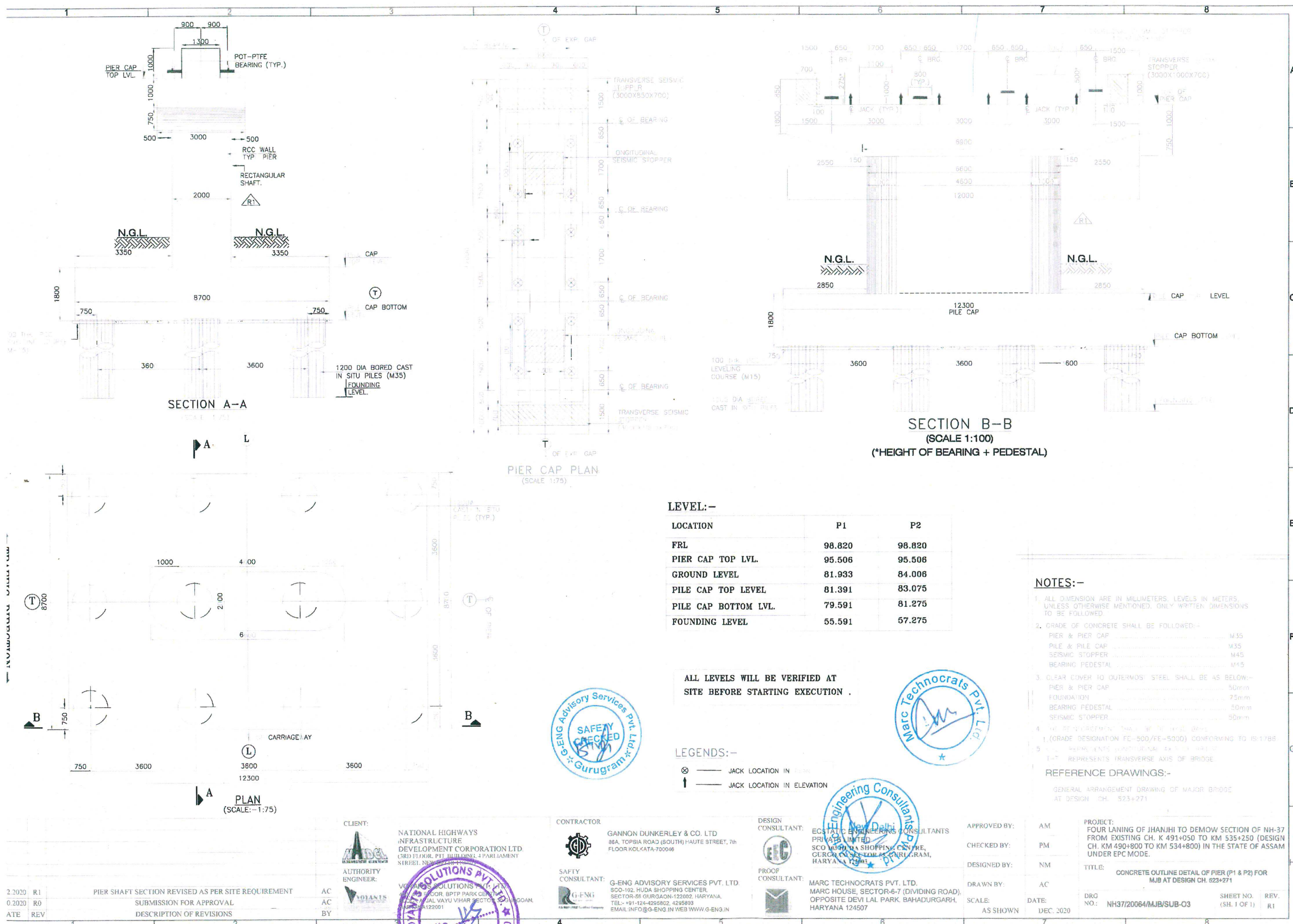
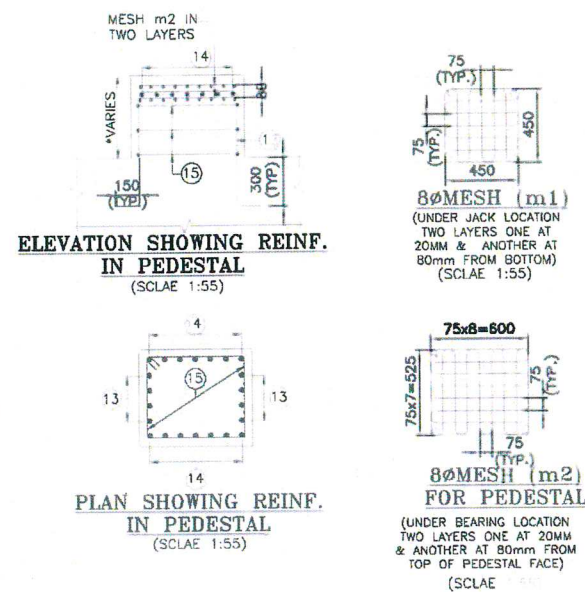
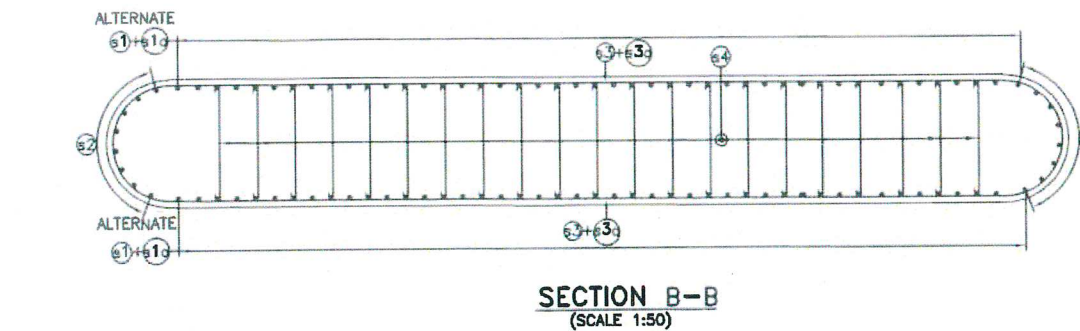
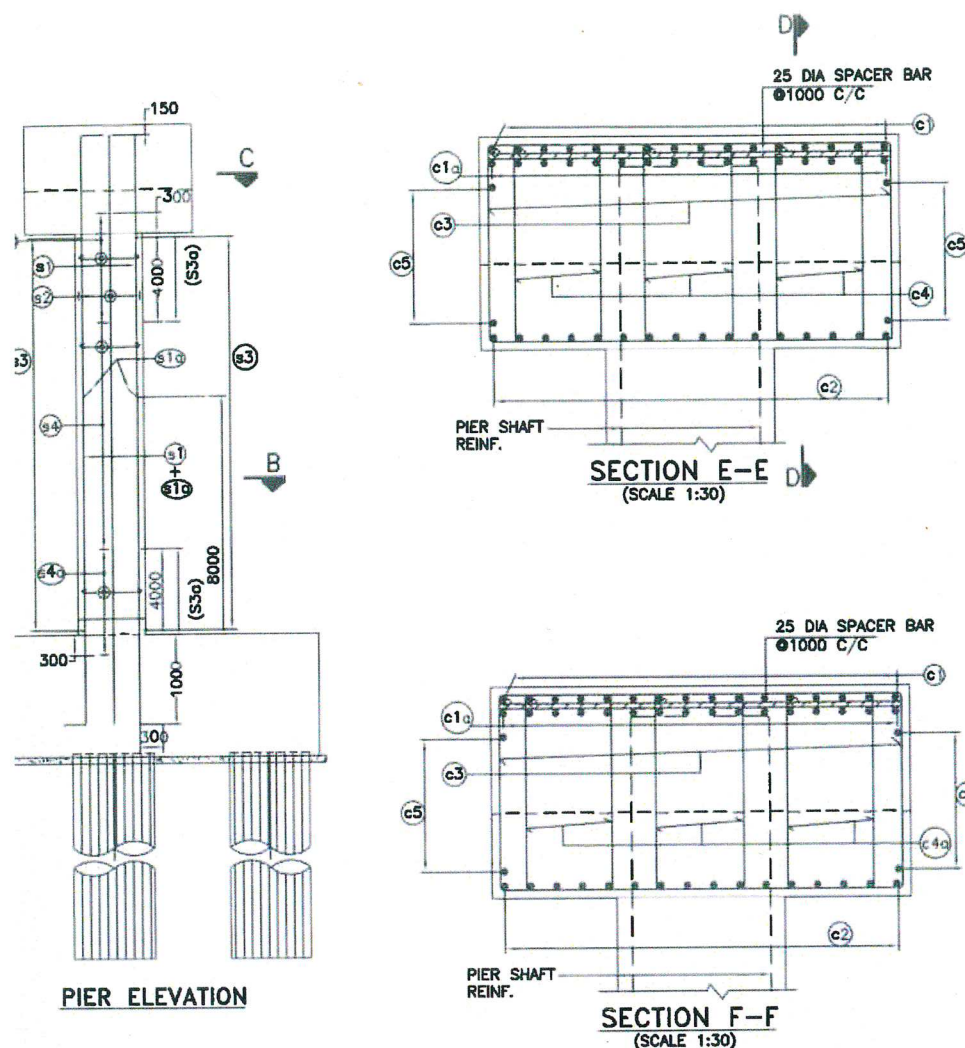


GOOD FOR CONSTRUCTION

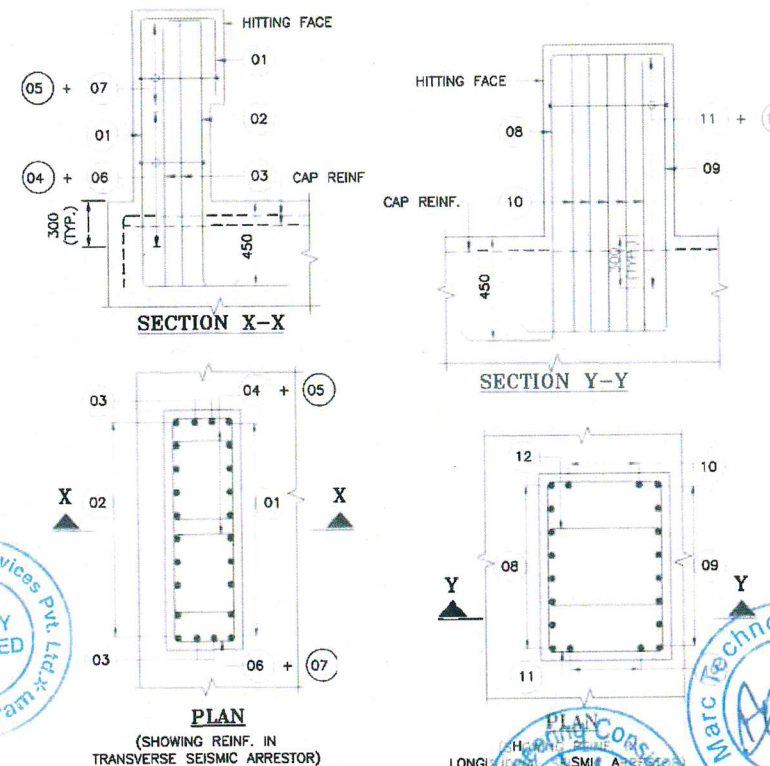
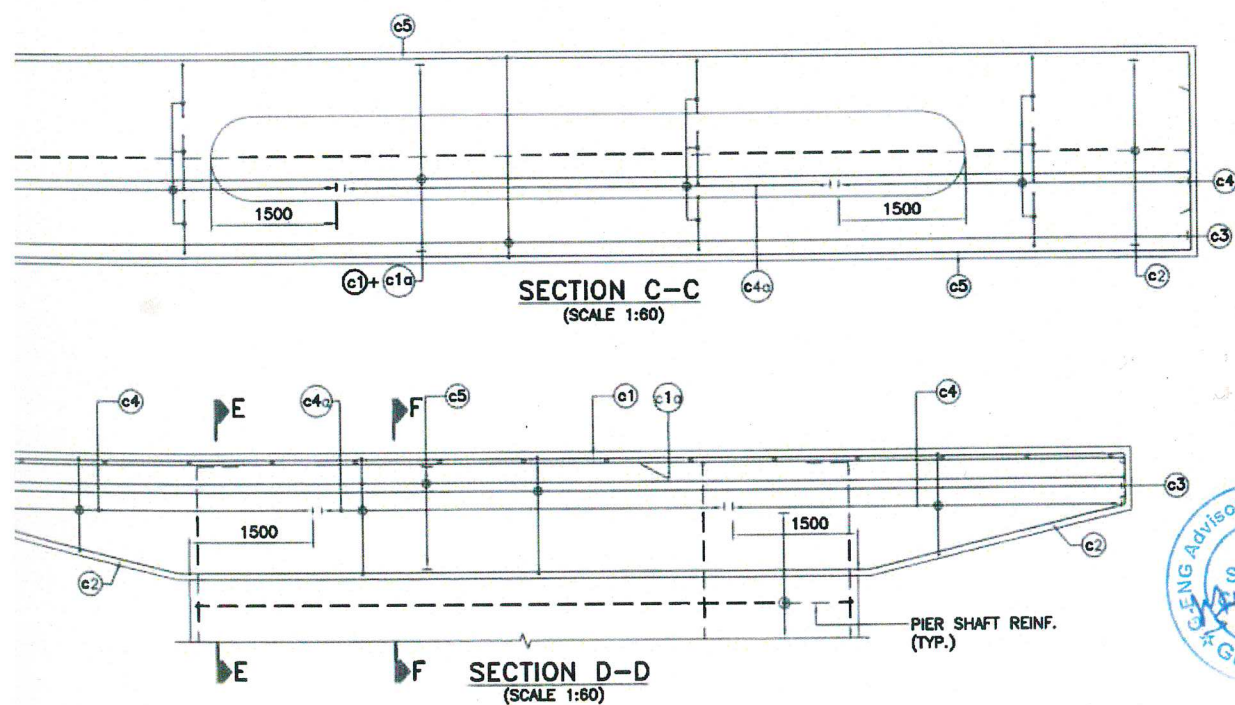


GOOD FOR CONSTRUCTION



BAR SHAPE SCHEDULE-2:

BAR MRKD.	DESCRIPTION	BAR SHAPE	REMARKS
01	20#90C/C		TRANSVERSE SEISMIC STOPPER
02	32#90C/C		
03	2x4 NOS-20#		
04	16#100C/C		
05	16#100C/C		LONG. SEISMIC STOPPER
06	16#100C/C		
07	16#100C/C		
08	32#90C/C		
09	20#90C/C		PEDESTAL
10	9x2 NOS-20#		
11	16#100C/C		
12	16#100C/C		
13	16#150C/C	150 150	
14	16#150C/C	150 150	
15	4 NOS-12#		

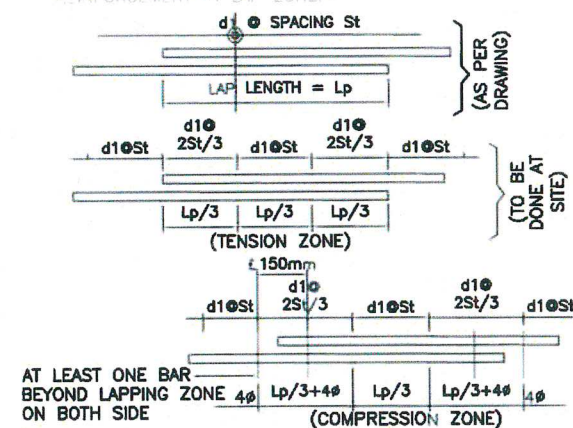


BAR SHAPE SCHEDULE-1:

BAR MARKE	DIA OF BAR	No. OF BARS	SPACING c/c	SHAPE
s1	32	-	110 c/c	500 500
s1a	BAR NOT USED			500 500
s2	32	-	2 X 27NOS.	500 500
s3	20	-	130 c/c	
s3a	20	-	130 c/c	
s4	10	-	300 c/c	LINK
s4a	10	-	200 c/c	LINK
c1	25	-	125 c/c	300 1300
c1a	25	-	125 c/c	
c2	20	-	125 c/c	500 500
c3	16	2 LEGGED	150 c/c	STIRRUP
c4	12	6 LEGGED	150 c/c	STIRRUP
c4a	12	6 LEGGED	250 c/c	STIRRUP
c5	16	-	150 c/c	LENGTH VARIES

NOTES:-

- ALL DIMENSION ARE IN MILLIMETERS, LEVELS IN METERS, UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSION TO BE FOLLOWED.
- LAP/SPLICES SHALL BE PROVIDED AS PER CLAUSE NO. 15.2.5 OF IRC-112-2011
- TMT HIGH YIELD STRENGTH DEFORMED BARS OF GRADE DESIGNATION FE-500/FE-500D CONFORMING TO IS:1786-1985 SHALL ONLY BE USED.
- MESH TYPE 'M1' & 'M2' SHALL BE PROVIDED AT EACH BEARING PEDESTAL & JACK LOCATIONS IN TWO LAYER AT 20mm AND AT 100mm FROM OUTER FACE OF CONCRETE.
- BARS SHOWN IN THE DRAWING ARE NOT TO BE USED IF ONLY WRITTEN DATA SHALL BE FOLLOWED.
- THIS DRAWING SHALL BE PLACED IN CONJUNCTION WITH SHEET 2 OF 2 OF THIS DRAWING.
- OVERLAPPING FOR SPLICING OF REINFORCEMENT SHALL BE AS PER CLAUSE NO 15.2.5 ARRANGEMENT OF TRANSVERSE REINFORCEMENT IN LAP ZONE:-



REFERENCE DRAWINGS:-

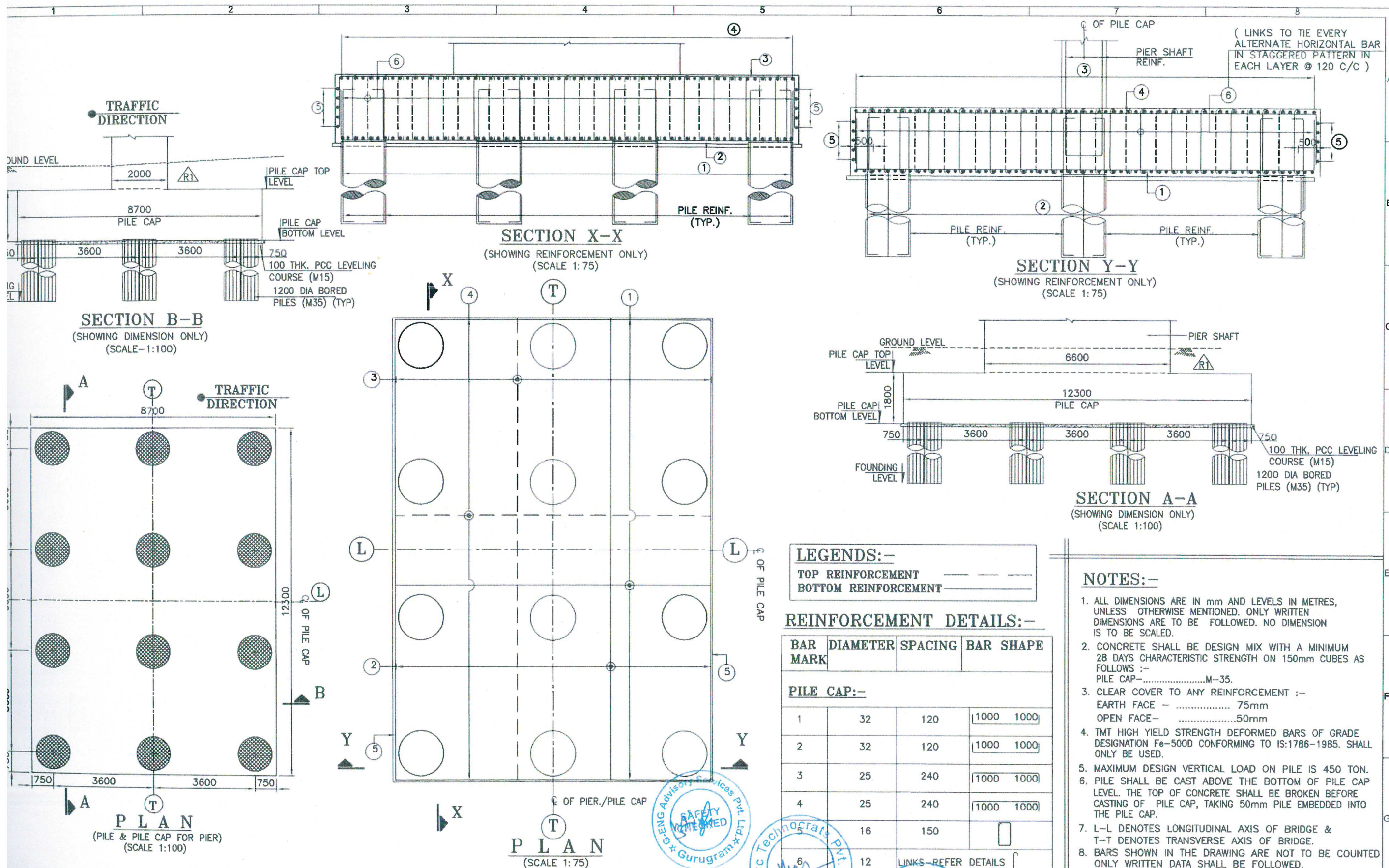
- GENERAL ARRANGEMENT DRAWING OF MINOR BRIDGE AT DESIGN CH. 523+271

LEGEND:-

TOP BAR
BOTTOM BAR

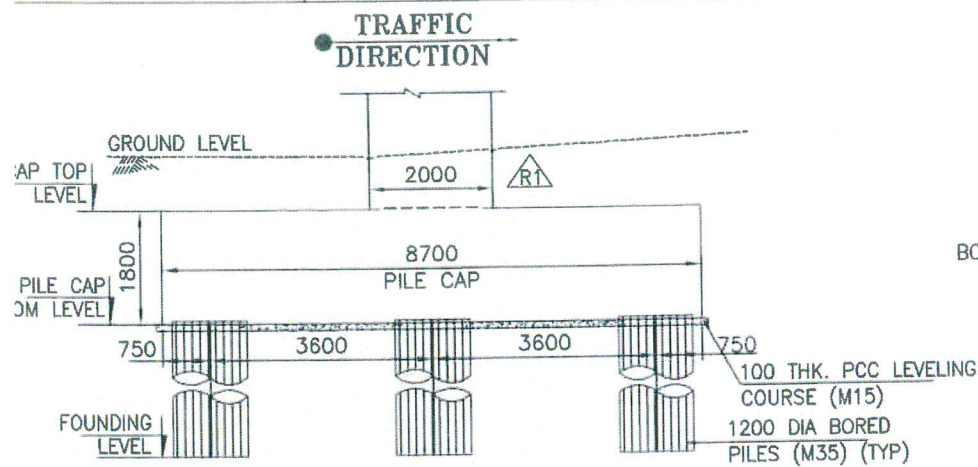
CLIENT: NATIONAL HIGHWAYS INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (3RD FLOOR, PTL BUILDING, 4 PARLIAMENT STREET, NEW DELHI-110001)		CONTRACTOR: GANNON DUNKERLEY & CO. LTD 86A, TOPSIA ROAD (SOUTH) HAUTE STREET, 7th FLOOR KOLKATA-700046		DESIGN CONSULTANT: ECOSTATIC ENGINEERING CONSULTANTS PRIVATE LIMITED SCO-102, HUDA SHOPPING CENTRE, GURGOAN, SECTOR-67, GURGRAM, HARYANA-122003		APPROVED BY: AM CHECKED BY: PM DESIGNED BY: NM DRAWN BY: AC SCALE: AS SHOWN DATE: DEC. 2020		PROJECT: FOUR LANE OF JHANIHI TO DEMOW SECTION OF NH-37 FROM EXISTING CH. K 491+050 TO KM 535+250 (DESIGN CH. KM 490+800 TO KM 534+800) IN THE STATE OF ASSAM UNDER EPC MODE.	
AT THORITY ENGINEER: VOYANTS SOLUTIONS PVT. LTD. 4th FLOOR, BPTP PARK CENTRA, BLOCK A, JAL VAYU VIHAR SECTOR 30 GURGAN, HARYANA-122001		SAFTY CONSULTANT: G-ENG ADVISORY SERVICES PVT. LTD. SCO-102, HUDA SHOPPING CENTER, SECTOR-67 GURGAON-122002, HARYANA. TEL: +91-124-4206802, 4206803 EMAIL: INFO@G-ENG.IN WEB: WWW.G-ENG.IN		PROOF CONSULTANT: MARC TECHNOCRATS PVT. LTD. MARC HOUSE, SECTOR-6-7 (DIVIDING ROAD), OPPOSITE DEVI LAL PARK, BAHADURGARH, HARYANA 124507		TITLE: REINFORCEMENT DETAILS OF PIER (P1 & P2) FOR MJB AT DESIGN CH. 523+271		DRG NO.: NH37/20084/MJB/SUB-04 SHEET NO. (SH. 1 OF 1) REV. R1	
PIER SHAFT SECTION REVISED AS PER SITE REQUIREMENT SUBMISSION FOR APPROVAL DESCRIPTION OF REVISIONS		AC AC BY		1 2 3 4 5 6 7 8		1 2 3 4 5 6 7 8		1 2 3 4 5 6 7 8	

GOOD FOR CONSTRUCTION

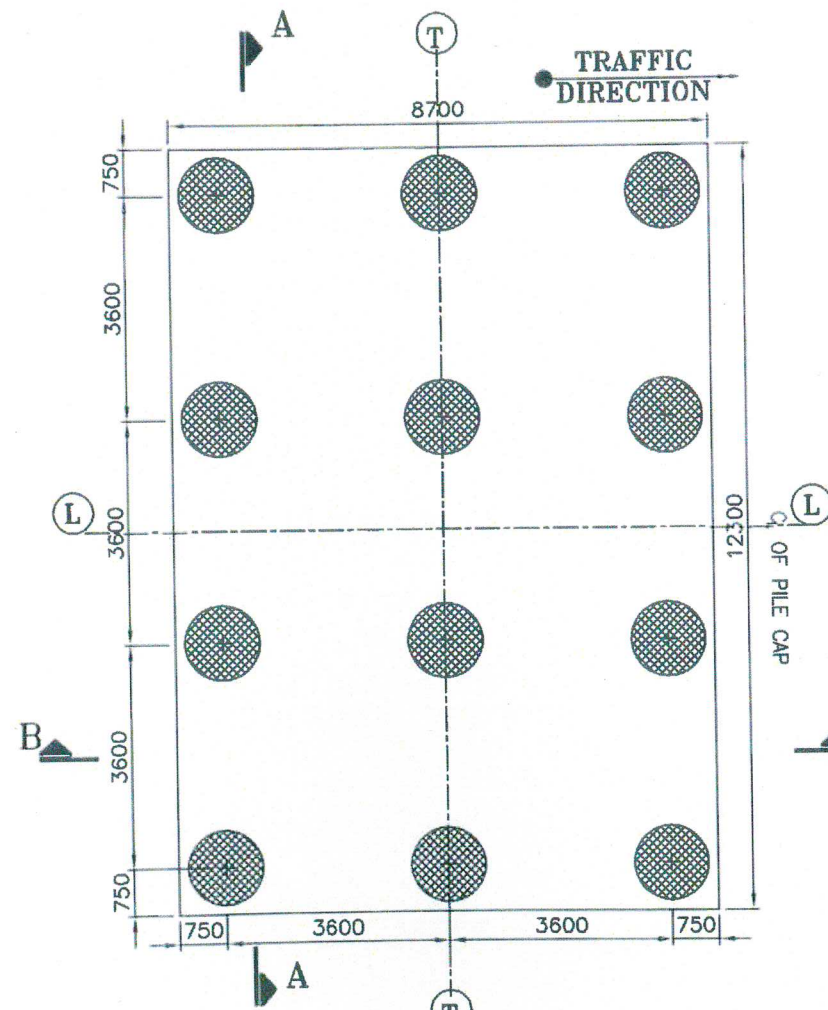


CLIENT:	NATIONAL HIGHWAYS INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. 3RD FLOOR, PFI BUILDING-1 PARLIAMENT STREET, NEW DELHI-110001	CONTRACTOR:	GANNON DUNKERLEY & CO. LTD 96A, TOPSIA ROAD (SOUTH) HAUTE STREET, 7TH FLOOR KOLKATA-700048	DESIGN CONSULTANT:	ECSTAC ENGINEERING CONSULTANTS PRIVATE LIMITED SCO-102 HUDA SHOPPING CENTRE, GURGAON, SECTOR 55, CHANDIGARH, HARYANA-122003	APPROVED BY:	AM	PROJECT:	FOUR LANING OF JHANJHI TO DEMOW SECTION OF NH-37 FROM EXISTING CH. K 491+050 TO KM 535+250 (DESIGN CH. KM 490+800 TO KM 534+800) IN THE STATE OF ASSAM UNDER EPC MODE.
AUTHORITY ENGINEER:	VOYANTS SOLUTIONS PVT. LTD. 401 4TH FLOOR, BPTP PARK CENTRE, BLOCK 'A', JAL VAYU VIHAR SECTOR 30 GURGAON, HARYANA-122001	SAFTY CONSULTANT:	G-ENG ADVISORY SERVICES PVT. LTD. SCO-102, HUDA SHOPPING CENTER, SECTOR-56 GURGAON-122002, HARYANA. TEL:- +91-124-4295802, 4295803 EMAIL:- INFO@G-ENG.PRV IN WEB:WWW.G-ENG.IN	PROOF CONSULTANT:	MARC TECHNOCRATS PVT. LTD. MARC HOUSE, SECTOR-6-7 (DIVIDING ROAD), OPPOSITE DEVI LAL PARK, BAHADURGARH, HARYANA 124507	CHECKED BY:	PM	TITLE:	DIMENSION AND REINFORCEMENT DETAILS OF PILE CAP AT PIER OF MAJOR BRIDGE AT CH. 523+271
REVISION:	PIER SHAFT SECTION REVISED AS PER SITE REQUIREMENT SUBMISSION FOR APPROVAL DESCRIPTION OF REVISIONS					DESIGNED BY:	NM	DRG NO.:	NH37/20064/MJB/FND-02
						DRAWN BY:	AC	SHEET NO.	REV.
						SCALE:	DATE:		

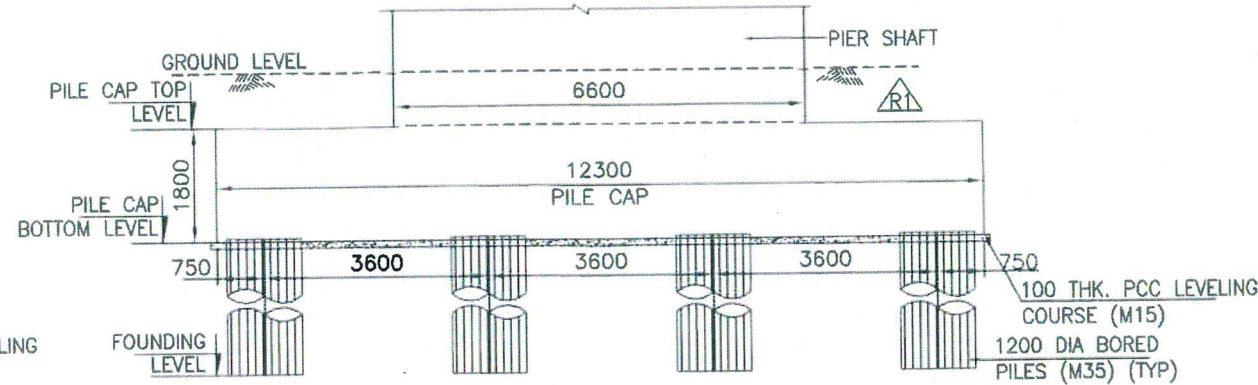
GOOD FOR CONSTRUCTION



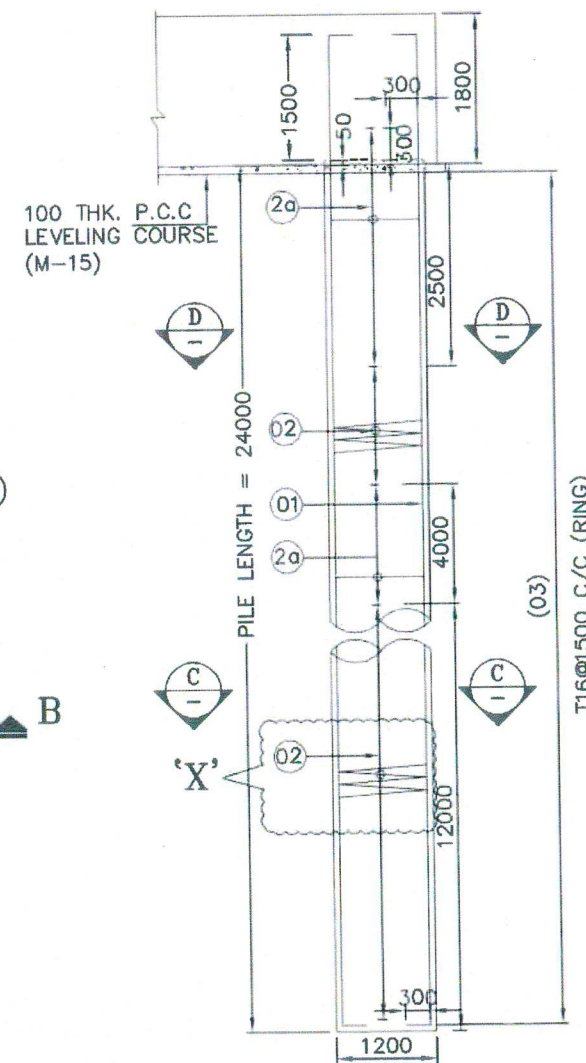
SECTION B-B
(SHOWING DIMENSION ONLY)
(SCALE-1:100)



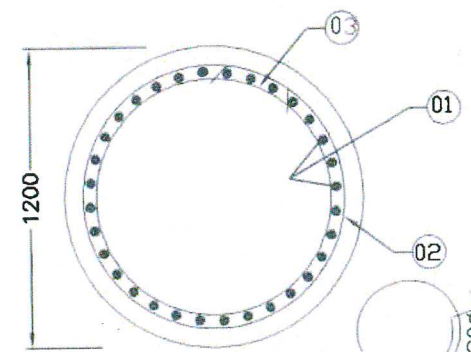
PLAN
(PILE & PILE CAP FOR PIER)
(SCALE 1:100)



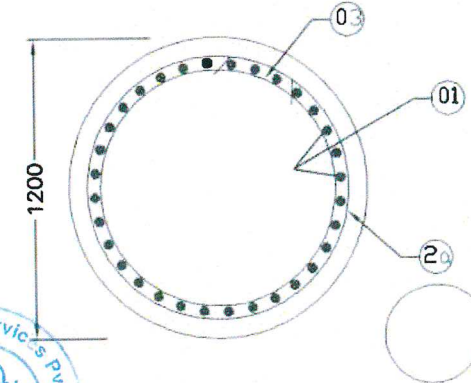
SECTION A-A
(SHOWING DIMENSION ONLY)
(SCALE-1:100)



R.C. DETAILS OF PILE
(SCALE 1:75)



SECTION C-C
(SCALE 1:25)



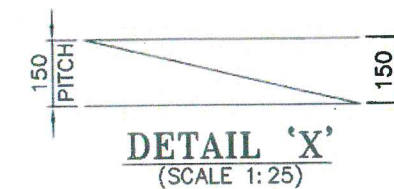
SECTION D-D
(SCALE 1:25)

NOTES:-

- ALL DIMENSIONS ARE IN mm AND LEVELS IN METRES, UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DIMENSION IS TO BE SCALED.
- CONCRETE SHALL BE DESIGN MIX WITH A MINIMUM 28 DAYS CHARACTERISTIC STRENGTH ON 150mm CUBES AS FOLLOWS :-
PILE -M-35.
- CLEAR COVER TO ANY REINFORCEMENT :-
EARTH FACE - 75mm
OPEN FACE-50mm
- TMT HIGH YIELD STRENGTH DEFORMED BARS OF GRADE DESIGNATION Fe-500D CONFORMING TO IS:1786-1985. SHALL ONLY BE USED.
- ACTUAL LOAD TEST SHALL BE CARRIED OUT ON A TEST PILE AS PER STANDARD SPECIFICATIONS TO DETERMINE SAFE VERTICAL ANT LATERAL CAPACITY OF PILE. IT SHALL HOWEVER BE ENSURED THAT IT IS NOT LESS THAN DESIGN WORKING LOAD (MAXIMUM REACTION) AS UNDER.
VERTICAL LOAD = 450 MTON (NORMAL CASE)
HORIZONTAL LOAD = 14 MTON (NORMAL CASE)
- PILE SHALL BE CAST ABOVE THE BOTTOM OF PILE CAP LEVEL. THE TOP OF CONCRETE SHALL BE BROKEN BEFORE CASTING OF PILE CAP, TAKING 50mm PILE EMBEDDED INTO THE PILE CAP.
- L-L DENOTES LONGITUDINAL AXIS OF BRIDGE & T-T DENOTES TRANSVERSE AXIS OF BRIDGE.
- BARS SHOWN IN THE DRAWING ARE NOT TO BE COUNTED ONLY WRITTEN DATA SHALL BE FOLLOWED.
- FOR PILING 10 % EXTRA CEMENT ABOVE DESIGN MIX SHALL BE USED.

REINFORCEMENT DETAILS:-

BAR MARK	DIAMETER	SPACING	BAR SHAPE
PILE:-			
01	20	27 Nos.	300
02	10	150	300
2a	16	100	300
03	16	1500	300



DETAIL 'X'
(SCALE 1:25)

CLIENT:		CONTRACTOR:		DESIGN CONSULTANT:		APPROVED BY:		PROJECT:	
NATIONAL HIGHWAYS INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.		GANNON DUNKERLEY & CO. LTD.		ECSTATIC ENGINEERING CONSULTANTS PRIVATE LIMITED		AM		FOUR LANE OF JHANJHI TO DEMOW SECTION OF NH-37 FROM EXISTING CH. K 491+050 TO KM 535+250 (DESIGN CH. KM 490+800 TO KM 534+800) IN THE STATE OF ASSAM UNDER EPC MODE.	
3RD FLOOR, 101 BUILDING, 4 PARLAMENT STREET, NEW DELHI-110001		86A, TOPSIA ROAD (SOUTH) HAUTE STREET, 7th FLOOR KOLKATA-700046		SCO 103/104, RA SHOPPING CENTER, GURGAON, SECTOR-55, GURGRAM, HARYANA-124003		PM		TITLE:	
AUTHORITY ENGINEER:		SAFTY CONSULTANT:		PROOF CONSULTANT:		NM		DIMENSION AND REINF. DETAILS OF PILE AT PIER (P1 & P2) FOR MAJOR BRIDGE AT CH. 523+271	
VOYANTS SOLUTIONS PVT. LTD.		G-ENG ADVISORY SERVICES PVT. LTD.		MARC TECHNOCRATS PVT. LTD.		AC		DRG NO.:	
203, 4TH FLOOR, RPT PARK CENTRA BLOCK A, JAL VAY VIRAR SECTOR 30 GURGOAN, HARYANA-122001		SCO-102, HUDA SHOPPING CENTER, SECTOR-58 GURGAON-122002, HARYANA. TEL:- +91-124-4295802, 4295803 EMAIL:INFO@G-ENG.IN WEB:WWW.G-ENG.IN		MARC HOUSE, SECTOR-6-7 (DIVIDING ROAD), OPPOSITE DEVI LAL PARK, BAHADURGARH, HARYANA 124507		AS SHOWN		NH37/20064/MJB/FND-02	
PIER SHAFT SECTION REVISED AS PER SITE REQUIREMENT		SUBMISSION FOR APPROVAL		DESCRIPTION OF REVISIONS		DATE:		SHEET NO.	
R1		R0		REV		DEC. 2020		(SII. 2 OF 3)	
								REV.	
								R1	