



SCHEDULE OF REINFORCEMENT OF BEAM FOR 3050 MM (10'-0") SPAN

MARK	DESCRIPTION	NO. OF BAR	Ø OF BAR IN MM	LENGTH IN MM	TOTAL LENGTH IN M.M.	TOTAL WEIGHT IN Kg.
a	1200	2	16	3780	7560	11.95
b	2300	1	16	2300	2300	3.64
c	1450	2	12	3830	7660	6.82
d	875	2	12	875	1750	1.55
STIRRUP	175	31	8	870	26970	10.52

SCHEDULE OF REINFORCEMENT OF BEAM FOR 3660 MM (12'-0") SPAN

MARK	DESCRIPTION	NO. OF BAR	Ø OF BAR IN MM	LENGTH IN MM	TOTAL LENGTH IN M.M.	TOTAL WEIGHT IN Kg.
a	4010	2	16	4490	8980	14.18
b	2725	2	16	2725	5450	8.61
c	4000	2	12	4560	9080	8.08
d	1030	4	12	1030	4120	3.67
STIRRUP	175	33	8	970	32010	12.48

SCHEDULE OF REINFORCEMENT OF BEAM FOR 4270 MM (14'-0") SPAN

MARK	DESCRIPTION	NO. OF BAR	Ø OF BAR IN MM	LENGTH IN MM	TOTAL LENGTH IN M.M.	TOTAL WEIGHT IN Kg.
a	4010	3	16	5200	15600	24.65
b	2725	2	16	3150	6300	9.95
c	4010	2	12	5250	10500	9.35
d	1210	4	12	1210	4840	4.30
STIRRUP	175	36	8	1070	38520	15.00

SCHEDULE OF REINFORCEMENT OF BEAM FOR 4880 MM (16'-0") SPAN

MARK	DESCRIPTION	NO. OF BAR	Ø OF BAR IN MM	LENGTH IN MM	TOTAL LENGTH IN M.M.	TOTAL WEIGHT IN Kg.
a	3580	3	16	5910	17730	28.10
b	3580	2	16	3580	7160	11.31
c	4010	2	12	5960	11920	10.61
d	1365	4	16	1365	5460	8.63
STIRRUP	175	37	8	1170	43290	16.88

SCHEDULE OF REINFORCEMENT OF BEAM FOR 5490 MM (18'-0") SPAN

MARK	DESCRIPTION	NO. OF BAR	Ø OF BAR IN MM	LENGTH IN MM	TOTAL LENGTH IN M.M.	TOTAL WEIGHT IN Kg.
a	4010	3	20	6620	19860	49.05
b	4010	1	20	4010	4010	9.90
c	5670	2	12	6670	13340	11.87
d	1520	6	16	1520	9120	14.41
STIRRUP	175	35	8	1270	44450	17.34

SCHEDULE OF REINFORCEMENT OF BEAM FOR 6100 MM (20'-0") SPAN

MARK	DESCRIPTION	NO. OF BAR	Ø OF BAR IN MM	LENGTH IN MM	TOTAL LENGTH IN M.M.	TOTAL WEIGHT IN Kg.
a	4470	3	20	7230	21690	53.57
b	4470	2	20	4470	8940	21.88
c	4880	2	12	7280	14560	12.95
d	1590	4	20	1590	6360	15.70
STIRRUP	175	42	8	1270	53340	20.80

- NOTE:-**
- ALL DIMENSIONS ARE IN MILLIMETRES.
 - OVERLAP FOR TOR BAR SHOULD BE AS PER IS-1786.
 - MINIMUM CLEAR COVER SHALL BE 30MM.
 - CEMENT CONCRETE SHALL BE OF GRADE M-20 (THE COMPRESSIVE STRENGTH OF CONCRETE SHALL NOT BE LESS THAN 20N/MM² AFTER 28 DAYS). ALL CONCRETING WORK SHALL CONFORM TO IS-456-2000.
 - LAPPING OF BARS SHALL BE STAGGERED AND SHALL NOT BE IN PROXIMITY OF THE REGION OF MAXIMUM BENDING MOMENT.
 - HYSD BARS OF Fe-415 CONFORMING TO IS-1786 SHALL BE USED IN REINFORCEMENT.
 - THE STRUCTURE HAS BEEN DESIGN TAKING INTO CONSIDERATION THE PROVISION FOR SEISMIC DESIGN AS PER IS 4326, IS 1893 AND IS 13920.
 - DISTANCE BETWEEN TWO CONSECUTIVE BEAM SHOULD NOT MORE THAN 3.0 MTR.
 - 115 MM THICK BRICK WALL PERMITTED ON BEAM.
 - ALL RCC AND C.C. WORK SHALL CONFORM TO IS: 456.

THIS DRAWING SUPERSEDE C.E'S PLAN No 157/VIII(C)

C.P.D.E.	
DY.C.E. (P&D)	
XEN./DESIGN	
AXEN./PL	
DESIGNATION	SIGNATURE
C.E'S PLAN NO.	SM-1-2013 2-912011
North Eastern Railway Head Quarter Office	
TYPE PLAN STRUCTURAL DETAIL OF R.C.C. BEAM FOR VARIOUS SPAN.	

REGISTER NO. TP/12-13/01

SUNIL KUMAR SRIVASTAV
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SCALE NOT TO SCALE

C.E'S CASE NO. W/22/BUILDING/T/P/DESIGN