

NATHKUCHI GSS, 33KV PEPSICO BAY

EQUIPMENT LEGEND:

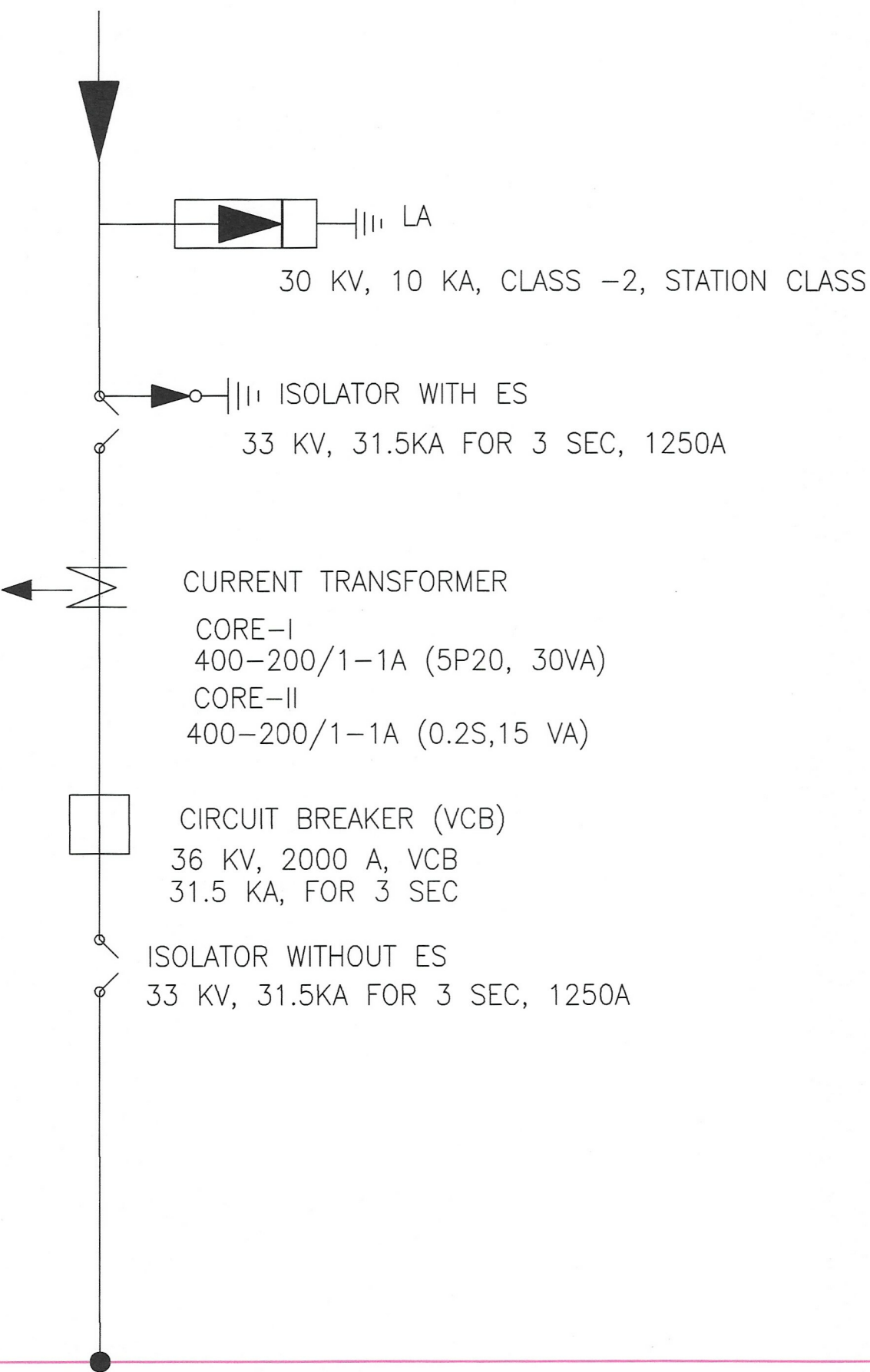
SL. NO.	DESCRIPTION	LEGENDS
1	VCB Circuit Breaker (CB)	
2	HBB Isolator w/o Earth Switch	
3	HBB Isolator with 1 Earth Switch	
4	Lightning Arrestor (LA)	
5	Current Transformer (CT)	
6	Post Insulator (PI)	
7	Potential Transformer (PT)	

SCALE 1CM= 1.5 M
ALL DIMENSIONS ARE IN METER

0	FIRST SUBMISSION	HDEC			
REV.	D E S C R I P T I O N	Prep.	Chkd.	Appd.	DATE
		SIGN			
		ASSAM ELECTRICITY GRID CORP. LTD BIJULEE BHAWAN, GUWAHATI			
PROJECT :	PROPOSED 33KV BAY FOR PEPSICO AT 132 /33 KV NATHKUCHIGSS, AEGCL				
TITLE :	SECTION				
OWNER :	ASSAM ELECTRICITY GRID CORP. LTD				
DRG. NO. : AEGCL/33KV BAY/NATHKUCHI-PEPSICO/SECTION/01					
				CHECKED BY :	

For Tender
Reference only

PEPSICO FEEDER



For Tender
Reference only

EXISTING
33 kV 3"Al. Tubular Bus

REFER LAYOUT
DRG. AEGCL/33 KV
BAY/NATHKUCHI-PEPSICO/LAYOUT/01
DTD. 12-11-24

EQUIPMENT LEGENDS

POWER TRANSFORMER	CIRCUIT BREAKER	ISOLATOR WITHOUT ES	ISOLATOR WITH ES	CURRENT TRANSFORMER	POTENTIAL TRANSFORMER	LIGHTNING ARRESTER

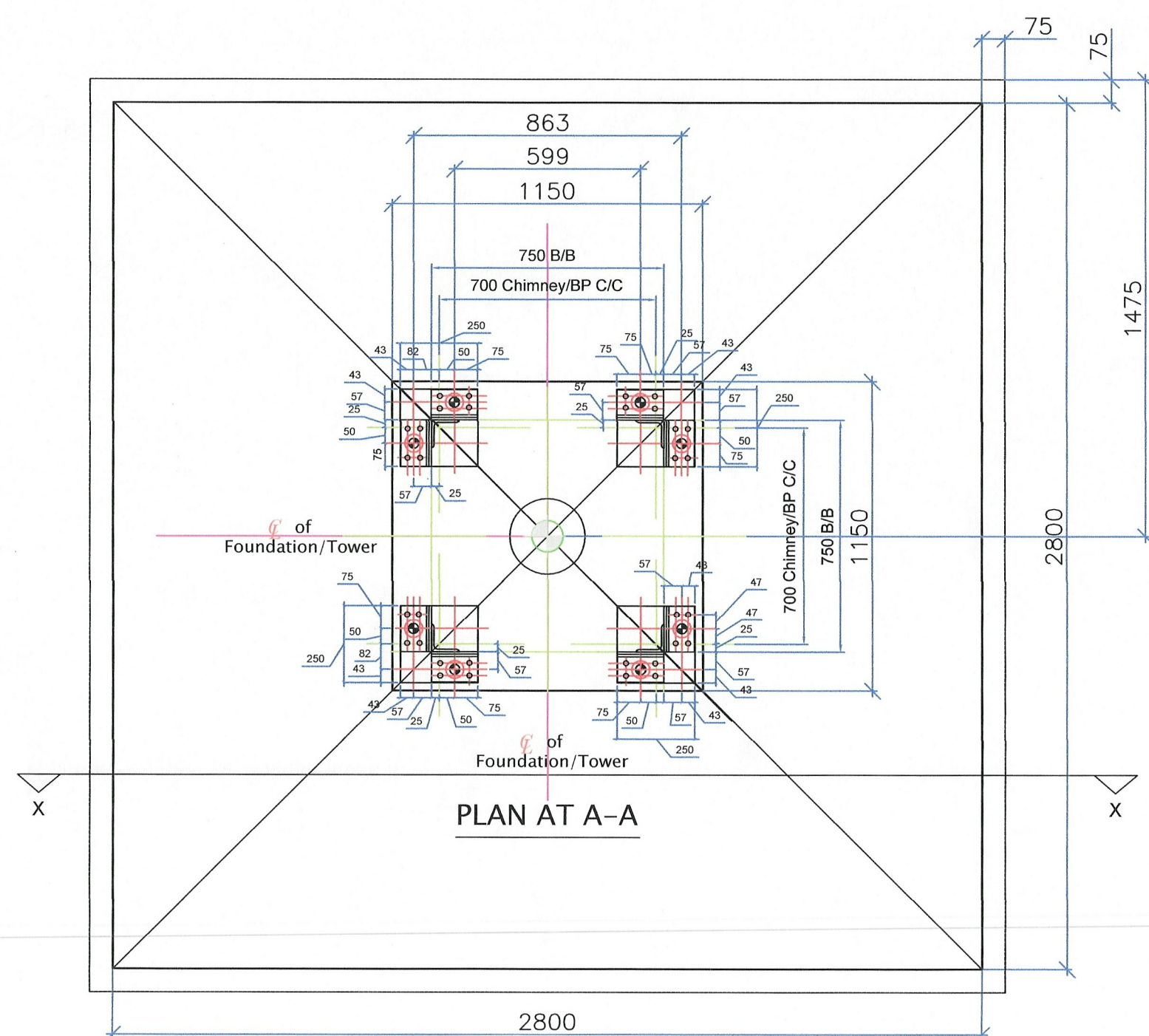
Nominal operating voltage : 33 KV
Maximum system voltage 36 KV:
Rated frequency : 50 Hz
Impulse withstand voltage : 170 KVp
Power frequency withstand voltage : 70 KV
Creepage distance : 31 mm/KV
Min clearance ph. to ph. : 320 mm
Min clearance ph. to earth : 320 mm
Sectional clearance : 3000 mm
Ground clearance from plinth : 3700 mm
STC : 31.5 KA for 3 sec

0	FIRST SUBMISSION	HDEC		
REV.	D E S C R I P T I O N	Prep.	Chkd.	Appd.
		SIGN		
		ASSAM ELECTRICITY GRID CORP. LTD. BIJULEE BHAWAN, GUWAHATI		
PROJECT :	CONSTRUCTION OF 33 KV BAY FOR PEPSICO FEEDER AT 132/ 33 KV NATHKUCHI GSS, AEGCL			
TITLE :	SINGLE LINE DIAGRAM			
OWNER :	ASSAM ELECTRICITY GRID CORP. LTD			
DRG.NO.: AEGCL/33 KV BAY/NATHKUCHI-PEPSICO/SLD/01				
			CHECKED BY :	



NTS

ALL DIMENSIONS ARE IN MILIMETER



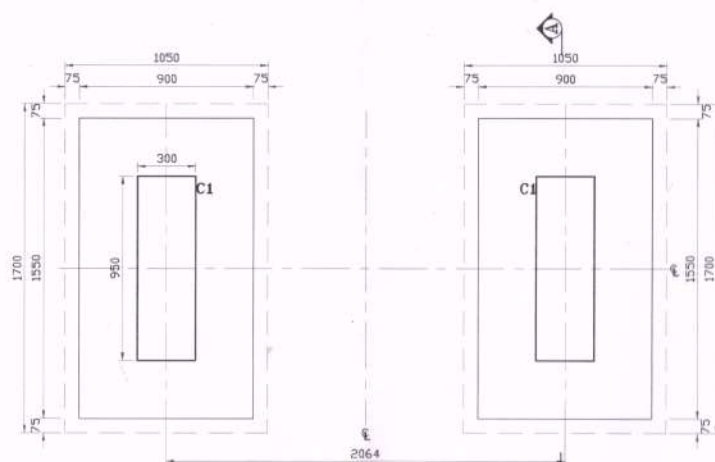
**For Tender
Reference only**

1. STEEL CONFORMING TO IS 1786
2. FGL DENOTES FINISHED GROUND LEVEL OF SS
3. LAP LENGTH SHALL BE 40 TIMES DIA OF BAR
4. PROVIDE CLEAR COVER TO REINFORCEMENT AS UNDER
50 MM FOR BOTTOM & TOP REINFORCEMENT OF RAFT
50 MM FOR SIDE REINFORCEMENT OF RAFT
50 MM FOR COLUMN
5. ANCHOR BOLTS AND OTHER EMBEDDED FIXTURES SHALL BE EMBEDDED DIRECTLY INTO CONCRETE WITH NECESSARY TEMPLATE
6. UNLESS OTHERWISE NOTED ALL CONCRETE SHALL BE OF GRADE M20 (1: 1.5:3)

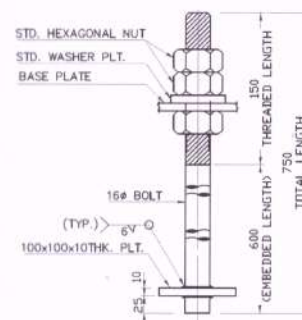
FDN OF C5

TENDER PURPOSE

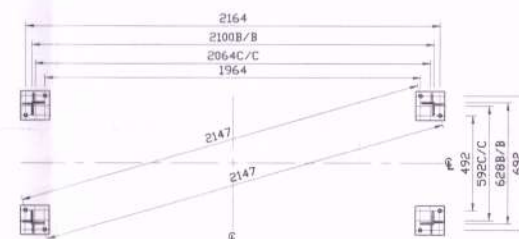
0	FIRST SUBMISSION	HDEC			
REV.		D E S C R I P T I O N	Prep.	Chkd.	
		SIGN _____			
ASSAM ELECTRICITY GRID CORP. LTD.					
PROJECT :	33 KV BAY EXPANSION AT 132/33 KV NATHKUCHI GSS FOR APDCL PEPSICO LINE				
TITLE :	FOUNDATION OF 33KV COLUMN "C5"				
/					
OWNER :	ASSAM ELECTRICITY GRID CORP. LTD.				
DRG. NO. : _____					
				CHECKED BY : _____	



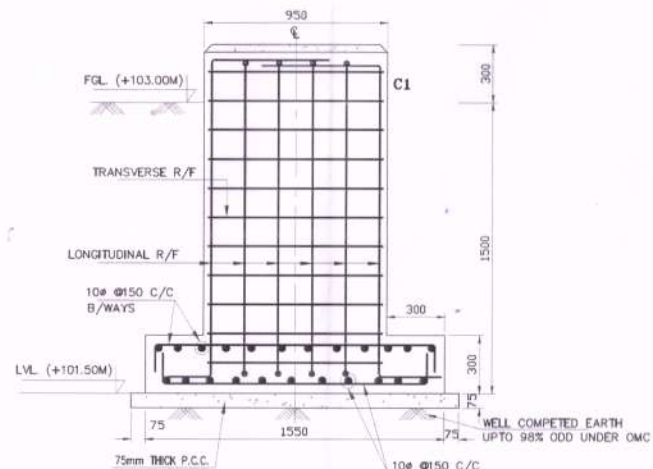
FOUNDATION PLAN FOR 33kV ISO
(SCALE 1:1)



TYPICAL DETAIL OF FOUNDATION BOLT



FOUNDATION BOLT SETTING OUT PLAN FOR 33kV ISO
(SCALE 1:1)



SECTION A-A
(SCALE 1:1)

For Tender
Reference only

REINFORCEMENT SCHEDULE FOR PEDESTAL					
PEDESTAL MARK	PEDESTAL SIZE	LONGITUDINAL REINFORCEMENT	X-SECTION	TRANSVERSE / TIE REINFORCEMENT	SHAPE OF TIES
C1	300 x 950	14NOS. - 12#		8# @ 150 c/c	

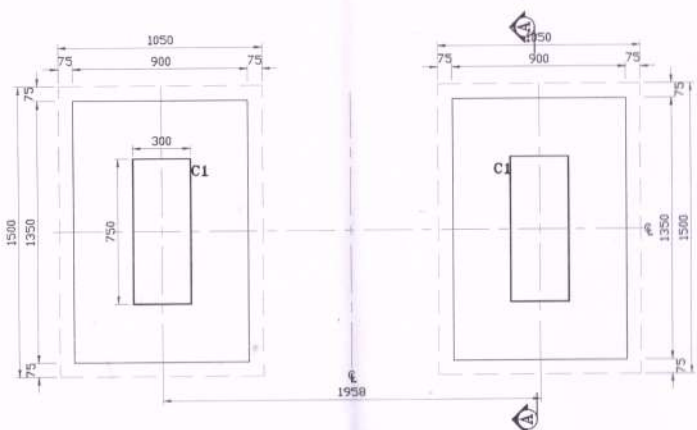
NOTES :-

- ALL DIMENSIONS ARE IN MM & LEVELS ARE IN Mtr. UNLESS OTHERWISE SPECIFIED.
- DIMENSIONS ARE NOT TO BE SCALED ONLY WRITTEN DIMENSION SHOULD BE FOLLOWED.
- REINFORCEMENT STEEL SHALL BE OF GRADE FE-500 CONFORMING TO IS 1786-2008 (LATEST EDITION).
- FOR MATERIAL AND WORKMANSHIP LATEST I.S. CODES SHALL BE THE GUIDING CRITERIA.
- ALL RCC SHALL BE OF CONCRETE MIX M25.
- ALL PLAIN CEMENT CONCRETE SHALL BE OF CONCRETE MIX M7.5.
- ONLY 43/53 GRADE CEMENT OF APPROVED QUALITY SHALL BE USED.
- CONC. MIX SHALL CONFORM TO IS:456-1978.
- CLEAR COVER TO MAIN REINFORCEMENT SHALL BE AS FOLLOWS:-
FOUNDATION - 50mm
PEDESTAL/COLUMN - 40mm
- UNLESS NOTED OTHERWISE MINIMUM DEVELOPMENT LENGTH FOR REINFORCEMENT SHALL BE 50x ϕ . (WHERE ϕ IS DIA OF BAR).
- FGL - FINISH GROUND LEVEL.

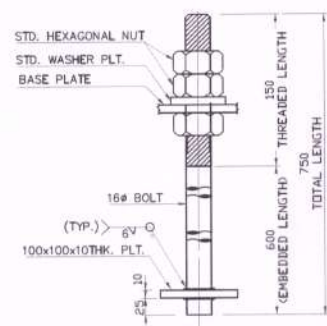
CUSTOMER:
 ASSAM ELECTRICITY GRID CORP. LTD.
BJULI BHAWAN, GUWAHATI, ASSAM

TITLE: **FOUNDATION DETAIL FOR 33kV ISO**

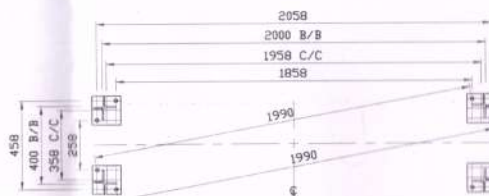
Scale
1:25
SIZE
A3
Sheets
1 OF 1
REV.
00



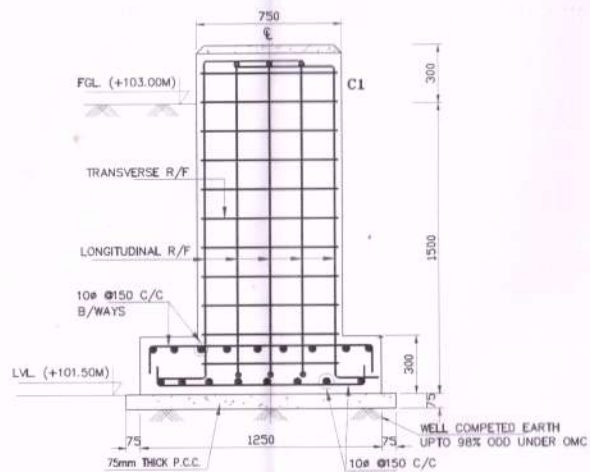
FOUNDATION PLAN FOR 33kV CT
(SCALE 1:1)



**TYPICAL DETAIL OF
FOUNDATION BOLT**



**FOUNDATION BOLT SETTING OUT PLAN
FOR 33kV CT**
(SCALE 1:1)



SECTION A-A
(SCALE 1:1)

For Tender
Reference only

REINFORCEMENT SCHEDULE FOR PEDESTAL					
PEDESTAL MARK	PEDESTAL SIZE	LONGITUDINAL REINFORCEMENT	X-SECTION	TRANSVERSE / TIE REINFORCEMENT	SHAPE OF TIES
C1	300 x 750	12NOS. - 12#		8# @150 c/c	

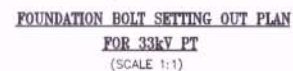
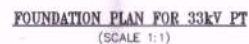
NOTES :-

1. ALL DIMENSIONS ARE IN MM & LEVELS ARE IN Mtr. UNLESS OTHERWISE SPECIFIED.
2. DIMENSIONS ARE NOT TO BE SCALED ONLY WRITTEN DIMENSION SHOULD BE FOLLOWED.
3. REINFORCEMENT STEEL SHALL BE OF GRADE FE-500 CONFORMING TO IS 1786-2008 (LATEST EDITION).
4. FOR MATERIAL AND WORKMANSHIP LATEST I.S. CODES SHALL BE THE GUIDING CRITERIA.
5. ALL RCC SHALL BE OF CONCRETE MIX M25.
6. ALL PLAIN CEMENT CONCRETE SHALL BE OF CONCRETE MIX M7.5.
7. ONLY 43/53 GRADE CEMENT OF APPROVED QUALITY SHALL BE USED.
8. CONC. MIX SHALL CONFORM TO IS:456-1978.
9. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE AS FOLLOWS:-
FOUNDATION - 50mm
PEDESTAL/COLUMN - 40mm
10. UNLESS NOTED OTHERWISE MINIMUM DEVELOPMENT LENGTH FOR REINFORCEMENT SHALL BE 50d.
(WHERE D IS DIA OF BAR).
11. FGL - FINISH GROUND LEVEL.

CLIENT:
 ASSAM ELECTRICITY GRID CORP. LTD.
BIJULI BHAWAN, GUWAHATI, ASSAM

TITLE: **FOUNDATION DETAIL FOR 33kV CT**

Scale
1:25
SIZE
A3
Sheets
1 OF 1
REV.
00



REINFORCEMENT SCHEDULE FOR PEDESTAL					
PEDESTAL MARK	PEDESTAL SIZE	LONGITUDINAL REINFORCEMENT	X-SECTION	TRANSVERSE / TIE REINFORCEMENT	SHAPE OF TIES
C1	300 x 750	12NOS.-12 ϕ		8 ϕ ϕ 150 c/c	

1. ALL DIMENSIONS ARE IN MM & LEVELS ARE IN MLY. UNLESS OTHERWISE SPECIFIED.
2. DIMENSIONS ARE NOT TO BE SCALED ONLY WRITTEN DIMENSION SHOULD BE FOLLOWED.
3. REINFORCEMENT STEEL SHALL BE OF GRADE FE-500 CONFORMING TO IS 1786-2008 (LATEST EDITION).
4. FOR MATERIAL AND WORKMANSHIP LATEST I.S. CODES SHALL BE THE GUIDING CRITERIA.
5. ALL RCC SHALL BE OF CONCRETE MIX. M25.
6. ALL PLAIN CEMENT CONCRETE SHALL BE OF CONCRETE MIX. M7.5.
7. ONLY 43/53 GRADE CEMENT OF APPROVED QUALITY SHALL BE USED.
8. CONC. MIX SHALL CONFORM TO IS 456-1978.
9. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE AS FOLLOWS:-
 - FOUNDATION - 50mm
 - PEDESTAL/COLUMN - 40mm
10. UNLESS NOTED OTHERWISE MINIMUM DEVELOPMENT LENGTH FOR REINFORCEMENT SHALL BE 50ϕ (WHERE ϕ IS DIA OF BAR).
11. FOL - FINISH GRAUND LEVEL

CLIENT:

ASSAM ELECTRICITY GRID CORP. LTD.
BIJULI BHAWAN, GUWAHATI, ASSAM

1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 26

FOUNDATION DETAIL FOR 33kV PT

Scale

1:30

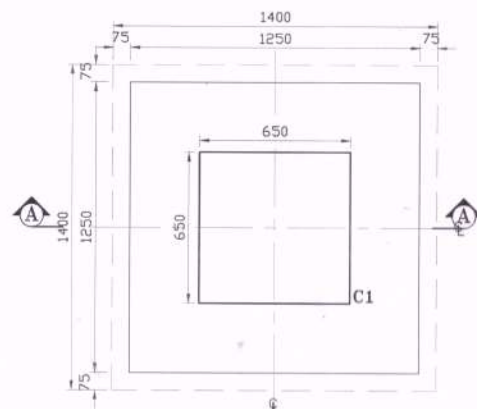
	SIZE
--	------

	A2
--	----

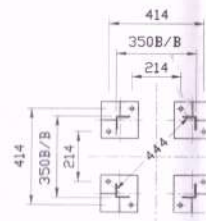
Sheets

1 OF 1

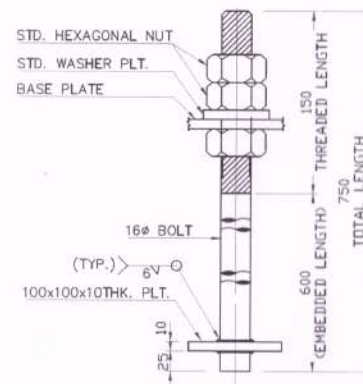
REV.



FOUNDATION PLAN FOR 33kV BPI
(SCALE 1:1)

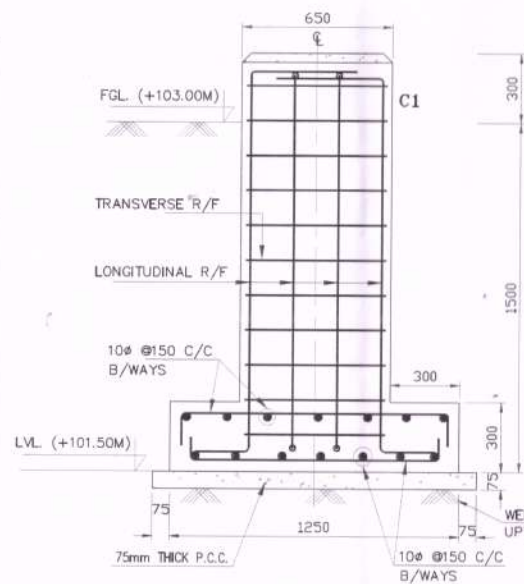


FOUNDATION BOLT SETTING OUT PLAN
FOR 33kV BPI
(SCALE 1:1)



TYPICAL DETAIL OF
FOUNDATION BOLT

For Tender
Reference only



SECTION A-A
(SCALE 1:1)

REINFORCEMENT SCHEDULE FOR PEDESTAL					
PEDESTAL MARK	PEDESTAL SIZE	LONGITUDINAL REINFORCEMENT	X-SECTION	TRANSVERSE / TIE REINFORCEMENT	SHAPE OF TIES
C1	650 x 650	12NOS.-12#		8# @150 c/c	

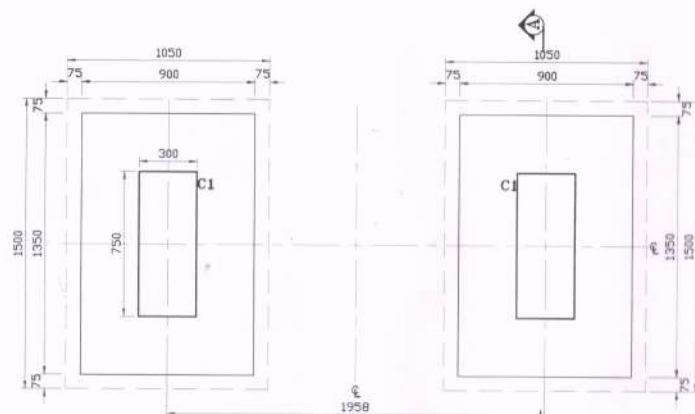
NOTES :-

1. ALL DIMENSIONS ARE IN MM & LEVELS ARE IN Mtr. UNLESS OTHERWISE SPECIFIED.
2. DIMENSIONS ARE NOT TO BE SCALED ONLY WRITTEN DIMENSION SHOULD BE FOLLOWED.
3. REINFORCEMENT STEEL SHALL BE OF GRADE FE-500 CONFIRMING TO IS 1786-2008 (LATEST EDITION).
4. FOR MATERIAL AND WORKMANSHIP LATEST I.S. CODES SHALL BE THE GUIDING CRITERIA.
5. ALL RCC SHALL BE OF CONCRETE MIX. M25.
6. ALL PLAIN CEMENT CONCRETE SHALL BE OF CONCRETE MIX. M7.5.
7. ONLY 43/53 GRADE CEMENT OF APPROVED QUALITY SHALL BE USED.
8. CONC. MIX SHALL CONFORM TO IS:456-1978.
9. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE AS FOLLOWS:-
FOUNDATION - 50mm
PEDESTAL/COLUMN - 40mm
10. UNLESS NOTED OTHERWISE MINIMUM DEVELOPMENT LENGTH FOR REINFORCEMENT SHALL BE 50 ϕ D. (WHERE D IS DIA OF BAR).
11. FGL - FINISH GROUND LEVEL.

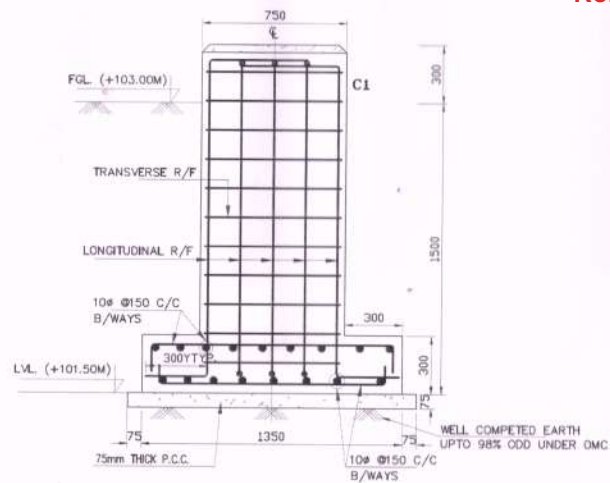
CLIENT:
ASSAM ELECTRICITY GRID CORP. LTD.
BIJULI BHAWAN, GUWAHATI, ASSAM

TITLE: **FOUNDATION DETAIL FOR 33kV BPI**

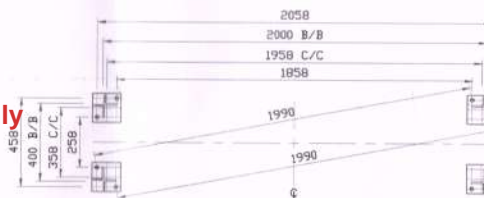
Scale
1:20
SIZE
A3
Sheets
1 OF 1
REV.
00



FOUNDATION PLAN FOR 33kV LA
(SCALE 1:1)

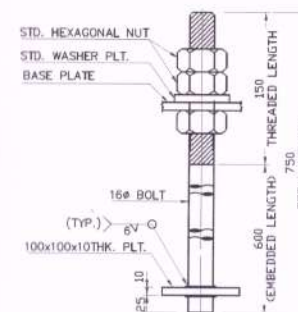


For Tender
Reference only



FOUNDATION BOLT SETTING OUT PLAN
FOR 33kV LA
(SCALE 1:1)

REINFORCEMENT SCHEDULE FOR PEDESTAL					
PEDESTAL MARK	PEDESTAL SIZE	LONGITUDINAL REINFORCEMENT	X-SECTION	TRANSVERSE / TIE REINFORCEMENT	SHAPE OF TIES
C1	300 x 750	12NOS.-12#		8# 150 c/c	



TYPICAL DETAIL OF
FOUNDATION BOLT

NOTES :-

- ALL DIMENSIONS ARE IN MM & LEVELS ARE IN Mtr. UNLESS OTHERWISE SPECIFIED.
- DIMENSIONS ARE NOT TO BE SCALED ONLY WRITTEN DIMENSION SHOULD BE FOLLOWED.
- REINFORCEMENT STEEL SHALL BE OF GRADE FE-500 CONFORMING TO IS 1786-2008 (LATEST EDITION).
- FOR MATERIAL AND WORKMANSHIP LATEST I.S. CODES SHALL BE THE GUIDING CRITERIA.
- ALL RCC SHALL BE OF CONCRETE MIX. M25.
- ALL PLAIN CEMENT CONCRETE SHALL BE OF CONCRETE MIX. M7.5.
- ONLY 43/53 GRADE CEMENT OF APPROVED QUALITY SHALL BE USED.
- CONC. MIX SHALL CONFORM TO IS:456-1978.
- CLEAR COVER TO MAIN REINFORCEMENT SHALL BE AS FOLLOWS:-
FOUNDATION - 50mm
PEDESTAL/COLUMN - 40mm
- UNLESS NOTED OTHERWISE MINIMUM DEVELOPMENT LENGTH FOR REINFORCEMENT SHALL BE 50d.
(WHERE D IS DIA OF BAR).
- FGL - FINISH GROUND LEVEL.

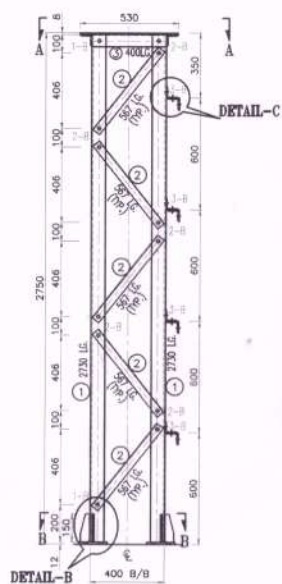
CLIENT:

ASSAM ELECTRICITY GRID CORP. LTD.
BILULI BHAWAN, GUWAHATI, ASSAM

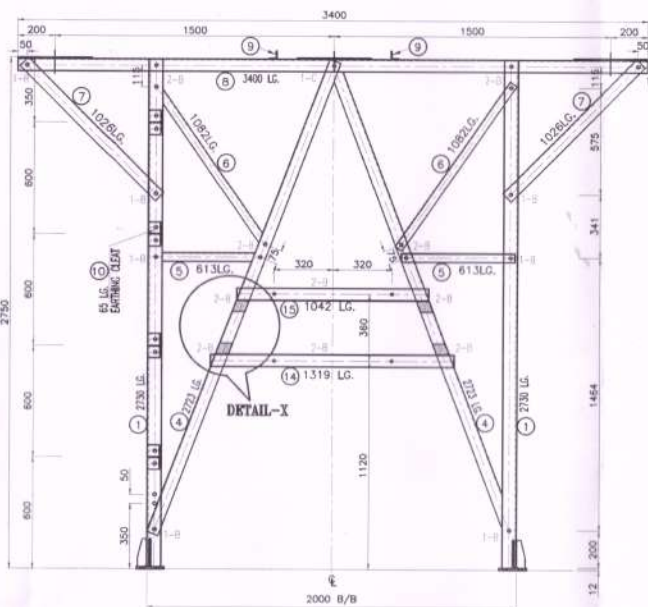
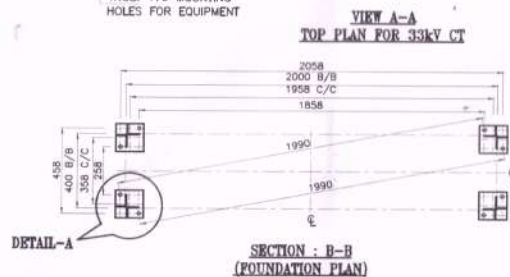
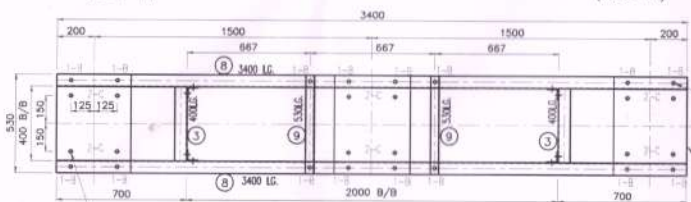
TITLE:

FOUNDATION DETAIL FOR 33kV LA

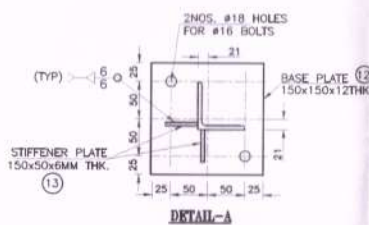
Scale
1:25
SIZE
A3
Sheets
1 OF 1
REV.
00



TRANSVERSE FACE
(SCALE=1:1)



LONGITUDINAL FACE
(SCALE=1:1)

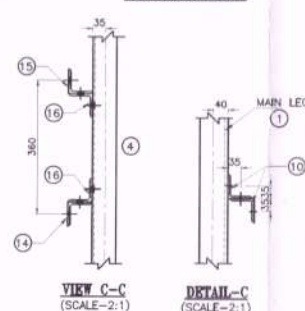
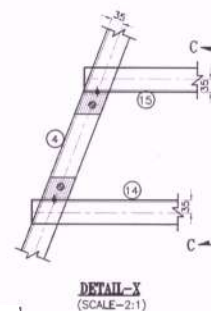
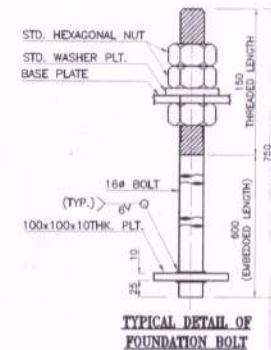
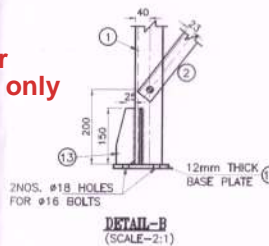


BILL OF MATERIAL FOR 33kV CT STRUCTURE						
MARK NO.	SECTION SIZE	LENGTH (mm)	UNIT WT IN Kg/m	WtPc (Kg)	NO.	TOTAL WT. IN Kg.
1	L 75 x 75 x 8	2730	8.900	24.297	4	97.188
2	L 45 x 45 x 5	567	3.400	1.926	10	19.278
3	L 65 x 65 x 6	400	5.800	2.320	2	4.640
4	L 65 x 65 x 6	2723	5.800	15.793	4	63.174
5	L 45 x 45 x 5	613	3.400	2.084	4	8.337
6	L 45 x 45 x 5	1082	3.400	3.679	4	14.715
7	L 65 x 65 x 6	1026	5.800	5.951	4	23.803
8	L 65 x 65 x 6	3400	5.800	19.720	2	39.440
9	L 45 x 45 x 5	530	3.400	1.802	2	3.604
10	L 65 x 65 x 6	65	5.800	0.377	16	6.032
11	PLT 8 MM 400 x 8	530	62.800	13.314	3	39.941
12	PLT 12 MM 150 x 12	150	94.200	2.120	4	8.478
13	PLT 8 MM 50 x 8	150	47.100	0.353	8	2.826
14	L 65 x 65 x 6	1319	5.800	7.650	1	7.650
15	L 65 x 65 x 6	1042	5.800	6.044	1	6.044
16	L 65 x 65 x 6	65	5.800	0.377	4	1.508
SUB TOTAL =						346.667
LIST OF BOLTS, NUTS, WASHER						
B	16-φ x 40 LG			0.132	120	15.840
C	16-φ x 45 LG			0.140	16	2.240
SPRING WASHER SUITABLE FOR M16 x 3.5MM				0.009	136	1.224
SUB TOTAL =						19.304
BOLTS, NUTS & WASHERS (FOR FOUNDATION)						
16 dia x 750 LG				2.067	8	16.536
SUB TOTAL =						16.536
SUMMARY OF WEIGHT						
WEIGHT OF STEEL (KG) =				346.667		
WEIGHT OF FOUNDATION BOLTS (KG) =				16.536		
WEIGHT OF BOLTS,NUTS & SP. EASHERS (KG) =				19.304		
FINAL WEIGHT FOR STRUCTURE (KG) =				382.497		

NOTES:-

- UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE IN MM.
- DO NOT SCALE, FOLLOW WRITTEN DIMENSION ONLY.
- FABRICATION SHALL CONFORM TO IS:802 PART-II(1972).
- ALL STRUCTURAL STEEL, BOLT, WASHER, ETC. SHALL BE AS PER LATEST EDITION OF INDIAN STANDARD.
- FULL SCALE SHOP LAYOUT SHALL BE DONE FOR ALL MEMBERS BEFORE ERECTION.
- ALL STEEL MEMBERS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH PROJECT TECHNICAL SPECIFICATION.
- UNLESS SPECIFIED OTHERWISE, ALL HOLES SHALL BE 17.5φ FOR 16φ BOLTS.
- MINIMUM EDGE SECURITY FOR 16MM BOLTS SHALL BE 25MM FROM CUT EDGE & 20MM FROM ROLLED EDGE.
- ALL UNNOTED MEMBERS ARE L45X45X5 WITH 23MM BACK MARK.
- UNLESS NOTED OTHERWISE, ALL WELDS ARE 6MM FILLET WELD.
- ALL GUSSET PLATES SHOULD BE 6mm THICK UNLESS NOTED OTHERWISE.
- ALL BRACING MEMBERS SHOWN IN THE PRESENT FACE SHALL BE MIRRORRED FOR OPPOSITE FACE.
- HARDWARE FOR FIXING CT SHALL BE PROVIDED BY SUPPLIER.

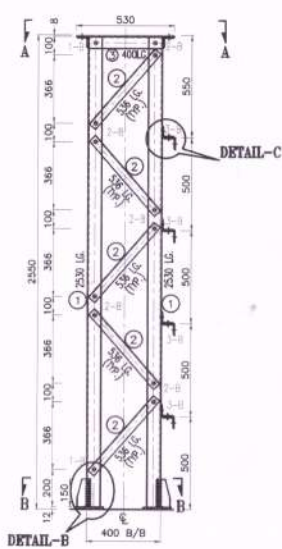
For Tender Reference only



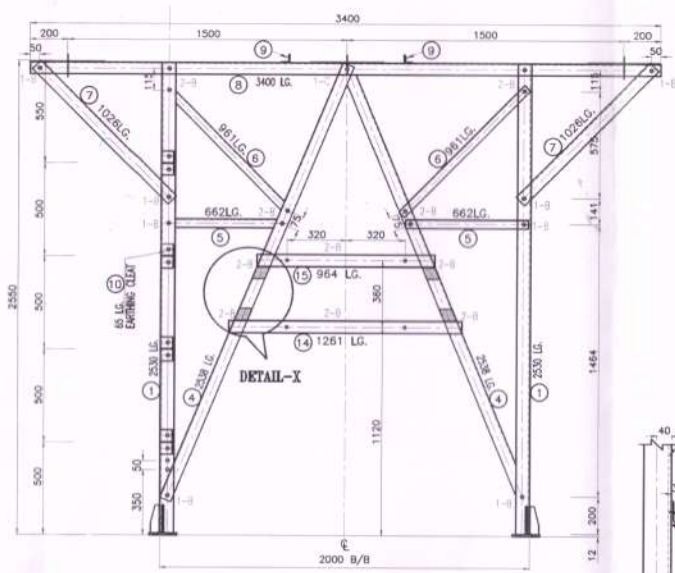
CLIENT:
ASSAM ELECTRICITY GRID CORP. LTD.
BIJULI BHAWAN, GUWAHATI, ASSAM

TITLE:
33kV CT STRUCTURAL DETAILS

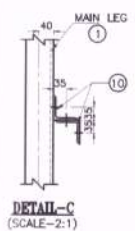
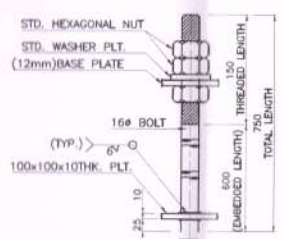
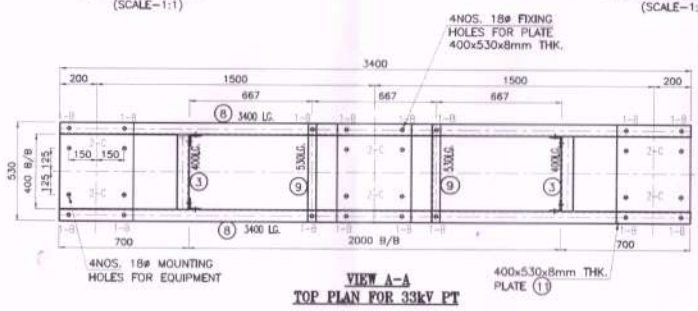
Scale 1:25
SIZE A3
Sheets 1 OF 1
REV. 00



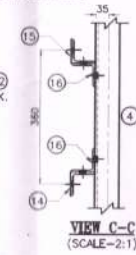
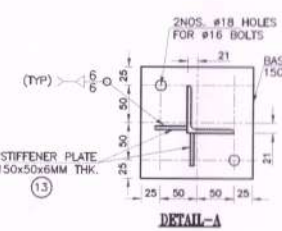
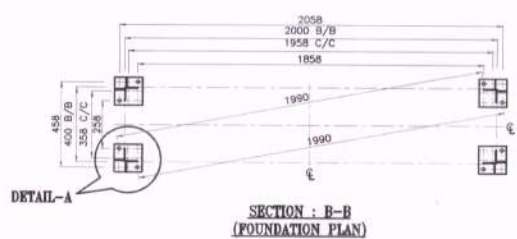
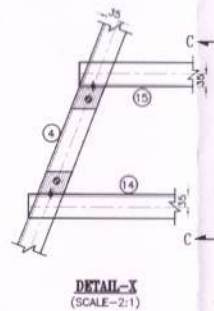
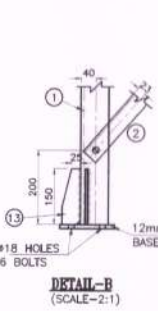
TRANSVERSE FACE
(SCALE=1:1)



LONGITUDINAL FACE
(SCALE=1:1)



For Tender
Reference only



BILL OF MATERIAL FOR 33kVPT STRUCTURE									
MARK NO.	SECTION SIZE		LENGTH (mm)	UNIT WL IN Kg/m	WSPC (Kg)	NO.	TOTAL WT. IN Kg.		
1	L	75 x 75 x 8	2530	8.900	22.517	4	90.068		
2	L	45 x 45 x 5	536	3.400	1.822	10	18.224		
3	L	65 x 65 x 6	400	5.800	2.320	2	4.640		
4	L	65 x 65 x 6	2538	5.800	14.720	4	58.882		
5	L	45 x 45 x 5	962	3.400	2.251	4	9.005		
6	L	45 x 45 x 5	961	3.400	3.267	4	13.070		
7	L	65 x 65 x 6	1029	5.800	5.951	4	23.803		
8	L	65 x 65 x 6	3400	5.800	19.720	2	39.440		
9	L	45 x 45 x 5	530	3.400	1.802	2	3.604		
10	L	65 x 65 x 6	65	5.800	0.377	16	6.032		
11	PLT	8 MM	400 x 8	530	62.800	3	39.941		
12	PLT	12 MM	150 x 12	150	94.200	2	1.200		
13	PLT	6 MM	50 x 6	150	47.100	0.353	8.268		
14	L	65 x 65 x 6	1261	5.800	7.314	1	7.314		
15	L	65 x 65 x 6	964	5.800	5.581	1	5.581		
16	L	65 x 65 x 6	65	5.800	0.377	4	1.508		
					SUB TOTAL =	332.423			
LIST OF BOLTS, NUTS, WASHER									
B	16-4 x 40 LG.				0.132	120	15.840		
C	16-4 x 45 LG.				0.140	16	2.240		
SPRING WASHER SUITABLE FOR M16 x 3.5MM					0.009	136	1.224		
					SUB TOTAL =	19.304			
BOLTS, NUTS & WASHERS (FOR FOUNDATION)									
16 dia x 750 LG.					2.067	8	16.536		
					SUB TOTAL =	16.536			
SUMMARY OF WEIGHT									
					WEIGHT OF STEEL (KG) =		332.423		
					WEIGHT OF FOUNDATION BOLTS (KG) =		16.536		
					WEIGHT OF BOLTS,NUTS & SP. WASHERS (KG) =		19.304		
					FINAL WEIGHT FOR STRUCTURE (KG) =		368.263		

- NOTES:-**
1. UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE IN MM.
 2. DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
 3. FABRICATION SHALL CONFORM TO IS:802 PART-II(1972).
 4. ALL STRUCTURAL STEEL, BOLT, WASHER, ETC. SHALL BE AS PER LATEST EDITION OF INDIAN STANDARD.
 5. FULL SCALE SHOP LAYOUT SHALL BE DONE FOR ALL MEMBERS BEFORE ERECTION.
 6. ALL STEEL MEMBERS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH PROJECT TECHNICAL SPECIFICATION.
 7. UNLESS SPECIFIED OTHERWISE, ALL HOLES SHALL BE 17.5# FOR 16# BOLTS.
 8. MINIMUM EDGE SECURITY FOR 16MM BOLTS SHALL BE 25MM FROM CUT EDGE & 20MM FROM ROLLED EDGE.
 9. ALL UNNOTED MEMBERS ARE L45X45X5 WITH 23MM BACK MARK.
 10. UNLESS NOTED OTHERWISE, ALL WELDS ARE 6MM FILLET WELD.
 11. ALL GUSSET PLATES SHOULD BE 6mm THICK UNLESS NOTED OTHERWISE.
 12. ALL BRACING MEMBERS SHOWN IN THE PRESENT FACE SHALL BE MIRRORRED FOR OPPOSITE FACE.
 13. HARDWARE FOR FIXING PT SHALL BE PROVIDED BY SUPPLIER.

ASSAM ELECTRICITY GRID CORP. LTD.
BIJULI BHAWAN, GUWAHATI, ASSAM

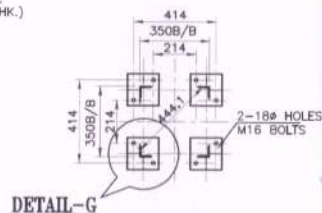
Scale 1:25

33kV PT STRUCTURAL DETAILS

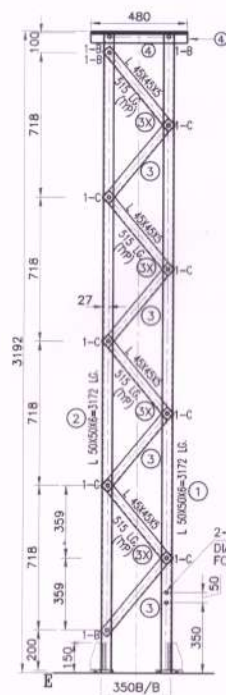
Size A3

Sheets 1 OF 1

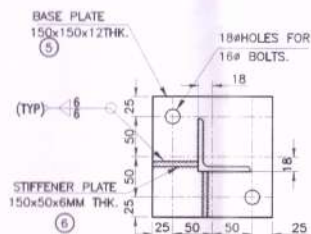
REV. 00



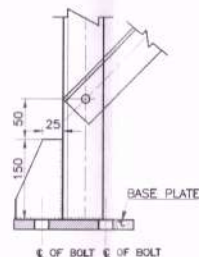
SECTION: E-E
(FOUNDATION PLAN)



TRANSVERSE ELEVATION



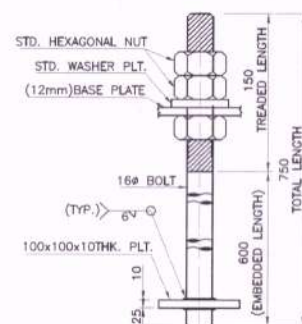
DETAIL-G



DETAIL 'F'

MARK No	SECTION	Length		Unit wt	wt / Pc	no. of pcs	Total weight(s)
		mm	Kgs	Kgs		Kgs	
PI	1 L	50x50x06	3172	4.5	14.27	2	28.55
PI	2 L	50x50x06	3172	4.5	14.27	2	28.55
PI	3 L	45x45x05	515	3.4	1.75	16	28.02
PI	3X L	45x45x05	515	3.4	1.75	16	28.02
PI	4 L	65x65x08	480	5.8	2.78	2	5.57
PI	5 plate	12mm	150 X 150	94.2	2.12	4	8.48
PI	6 plate	6mm	50 X 150	47.1	0.35	8	2.83
PI	7 plate	8mm	480 X 480	62.8	14.47	1	14.47
TOTAL WEIGHT OF FABRICATED MEMBERS							144.47
BOLTS & NUTS STATEMENT							
		NOS.	UNIT WT			TOTAL WT	
B	10dia 35 lg	18	0.124			2.232	
C	10dia 40 lg	32	0.132			4.224	
	spring washer	50	0.009			0.45	
Z	16 dia 35 lg	8	0.145			1.164	
	spring washer	8	0.009			0.072	
(Total 1 sp. Washer)							
	6mm pcw asisher 30 O.D	-	0.042			-	
	6mm pcw asisher 30 O.D	-	0.057			-	
	10mm pcw asisher 30 O.D	-	0.071			-	
TOTAL WEIGHT OF BOLTS & NUTS						8.16	
BOLTS, NUTS & WASHERS (FOR FOUNDATION)							
16 dia = 750 O.D FOR 600				2.067	8	16.536	
TOTAL WEIGHT OF BOLTS & NUTS					8.16	8.16	
TOTAL WEIGHT OF FABRICATED MEMBERS						144.47	
TOTAL WEIGHT OF PI STR						169.17	

**For Tender
Reference only**







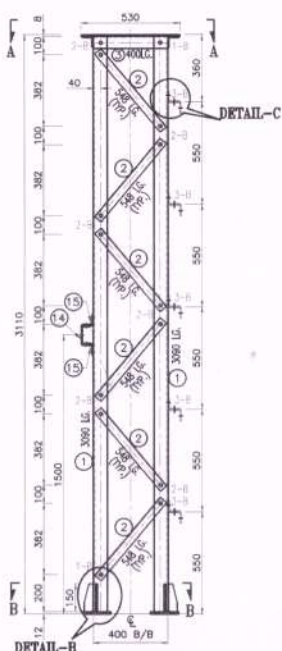
TYPICAL DETAIL OF
FOUNDATION BOLT

1. UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE IN MM.
2. DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
3. FABRICATION SHALL CONFORM TO IS:802 PART-II(1972).
4. ALL STRUCTURAL STEEL, BOLT, WASHER, ETC. SHALL BE AS PER LATEST EDITION OF INDIAN STANDARD.
5. FULL SCALE SHOP LAYOUT SHALL BE DONE FOR ALL MEMBERS BEFORE ERECTION.
6. ALL STEEL MEMBERS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH PROJECT TECHNICAL SPECIFICATION.
7. UNLESS SPECIFIED OTHERWISE, ALL HOLES SHALL BE 17.5 ϕ FOR 16 ϕ BOLTS.
8. MINIMUM EDGE SECURITY FOR 16MM BOLTS SHALL BE 25MM FROM CUT EDGE & 20MM FROM ROLLED EDGE.
9. ALL UNNOTED MEMBERS ARE L45X45X5 WITH 23MM BACK MARK.
10. UNLESS NOTED OTHERWISE, ALL WELDS ARE 6MM FILLET WELD.
11. ALL GUSSET PLATES SHOULD BE 6mm THICK UNLESS NOTED OTHERWISE.
12. ALL BRACING MEMBERS SHOWN IN THE PRESENT FACE SHALL BE MIRRORRED FOR OPPOSITE FACE.
13. HARDWARE FOR FIXING BPI SHALL BE PROVIDED BY SUPPLIER.

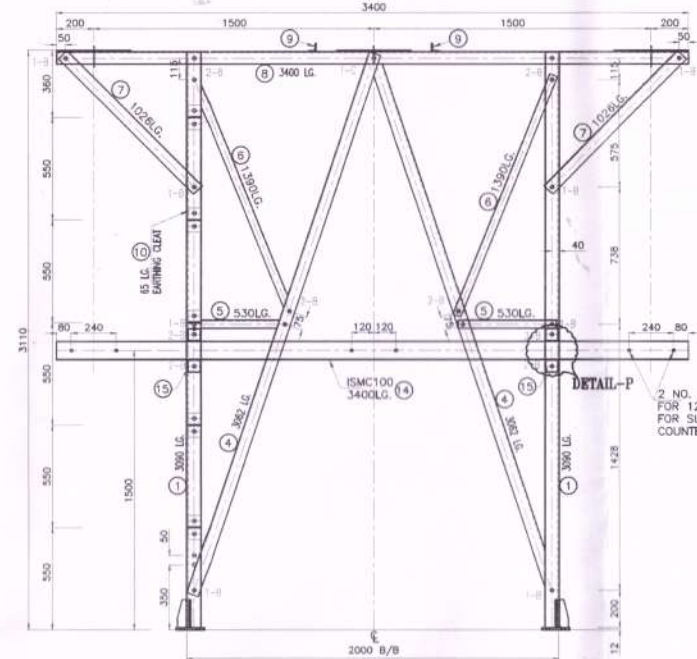
ASSAM ELECTRICITY GRID CORP. LTD.
BIJULI BHAWAN, GUWAHATI, ASSAM

TITLE: 33kV BPI STRUCTURAL DETAILS

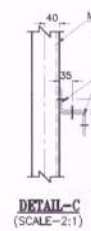
	Scale 1:25
	SIZE A3
	Sheets 1 OF 1
	REV. 00



TRANSVERSE FACE
(SCALE-1:1)

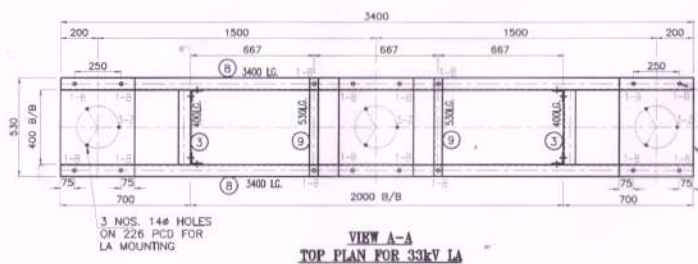
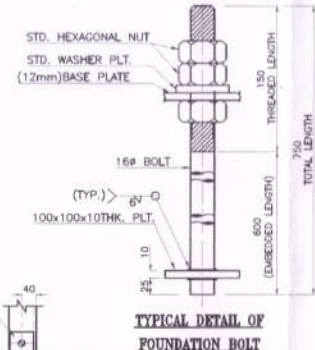


2 NOS. 14# HOLES FOR SURGE COUNTER MOUNTING

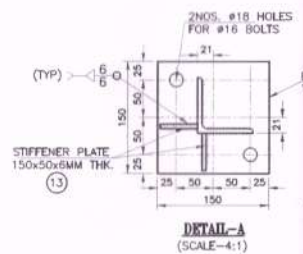
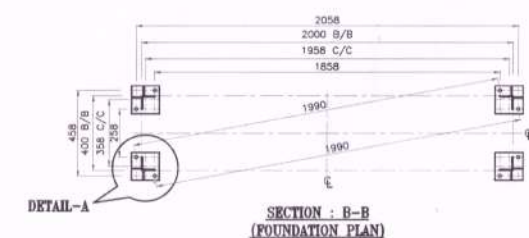


BILL OF MATERIAL FOR 33kV LA STRUCTURE							
MARK NO.	SECTION SIZE	LENGTH (mm)	UNIT WT IN Kg/m	WSPC (kg)	NO.	TOTAL WT. IN Kg	
1	L 75 x 75 x 8	3090	8.900	27.901	4	111.604	
2	L 45 x 45 x 5	548	3.400	1.863	24	44.717	
3	L 65 x 65 x 6	400	5.800	2.320	2	4.640	
4	L 65 x 65 x 6	3082	5.800	17.786	4	71.038	
5	L 45 x 45 x 5	530	3.400	1.802	4	7.208	
6	L 45 x 45 x 5	1300	3.400	4.726	4	16.904	
7	L 65 x 65 x 6	1029	5.800	5.951	4	23.803	
8	L 65 x 65 x 8	3400	5.800	19.720	2	39.440	
9	L 45 x 45 x 5	530	3.400	1.802	2	3.604	
10	L 65 x 65 x 6	65	5.800	0.377	20	7.540	
11	PLT 8 MM	400 x 8	530	62.800	13.314	3	30.941
12	PLT 12 MM	150 x 12	150	94.200	2.130	4	8.478
13	PLT 6 MM	50 x 6	150	47.100	0.383	8	2.938
14	ISMC 100 x 50	3400	9.580	32.594	1	32.590	
15	L 65 x 65 x 8	65	5.800	0.377	4	1.508	
SUB TOTAL =						416.155	
LIST OF BOLTS, NUTS, WASHER							
B	16-# x 40 LG.			0.132	126	16.632	
C	16-# x 45 LG.			0.140	4	0.560	
D	12-# x 100 LG.			0.117	10	1.170	
E	SPRING WASHER SUITABLE FOR M16 x 3.5MM			0.009	140	1.260	
SUB TOTAL =						18.722	
BOLTS, NUTS & WASHERS (FOR FOUNDATION)							
	16 dia x 750 LG.			2.067	8	16.536	
SUB TOTAL =						16.536	
SUMMARY OF WEIGHT							
WEIGHT OF STEEL (kg) =						416.155	
WEIGHT OF FOUNDATION BOLTS (kg) =						16.536	
WEIGHT OF BOLTS,NUTS & SP. WASHERS (kg) =						18.722	
FINAL WEIGHT FOR STRUCTURE (kg) =						452.413	

- NOTES:-**
- UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE IN MM.
 - DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
 - FABRICATION SHALL CONFORM TO IS-802 PART-II (1972).
 - ALL STRUCTURAL STEEL, BOLT, WASHER, ETC. SHALL BE AS PER LATEST EDITION OF INDIAN STANDARD.
 - FULL SCALE SHOP LAYOUT SHALL BE DONE FOR ALL MEMBERS BEFORE ERECTION.
 - ALL STEEL MEMBERS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH PROJECT TECHNICAL SPECIFICATION.
 - UNLESS SPECIFIED OTHERWISE, ALL HOLES SHALL BE 17.5# FOR 16# BOLTS.
 - MINIMUM EDGE SECURITY FOR 16MM BOLTS SHALL BE 25MM FROM CUT EDGE & 20MM FROM ROLLED EDGE.
 - ALL UNNOTED MEMBERS ARE L45X45X5 WITH 23MM BACK MARK.
 - UNLESS NOTED OTHERWISE, ALL WELDS ARE 6MM FILLET WELD.
 - ALL GUSSET PLATES SHOULD BE 6mm THICK UNLESS NOTED OTHERWISE.
 - ALL BRACING MEMBERS SHOWN IN THE PRESENT FACE SHALL BE MIRRORRED FOR OPPOSITE FACE.
 - HARDWARE FOR FIXING LA SHALL BE PROVIDED BY SUPPLIER.



For Tender Reference only



CLIENT:
ASSAM ELECTRICITY GRID CORP. LTD.
BIBULI BHAWAN, GUWAHATI, ASSAM

TITLE:
33kV LA STRUCTURAL DETAILS

Scale 1:25
SIZE A3
Sheets 1 OF 1
REV. 00