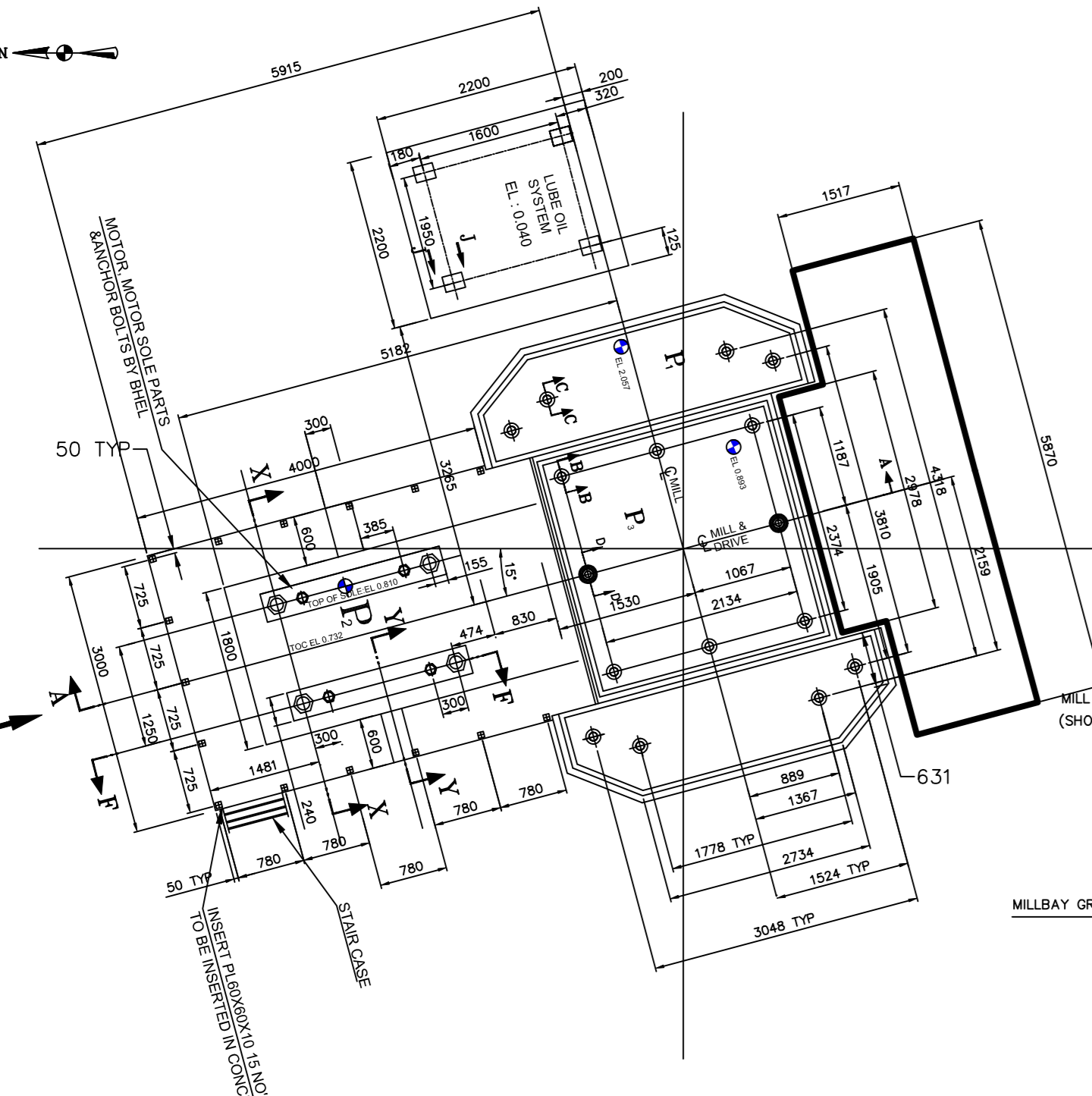
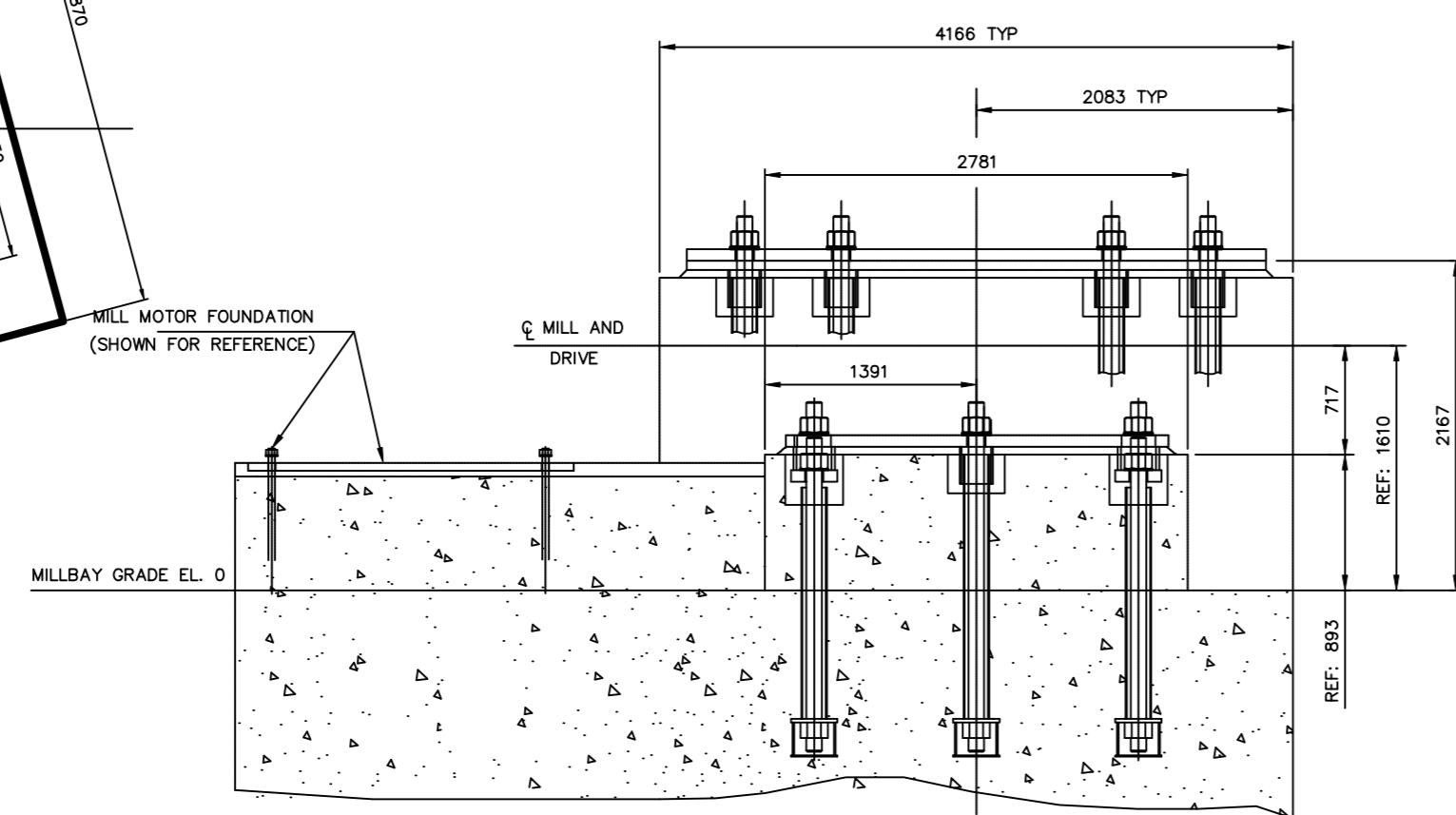


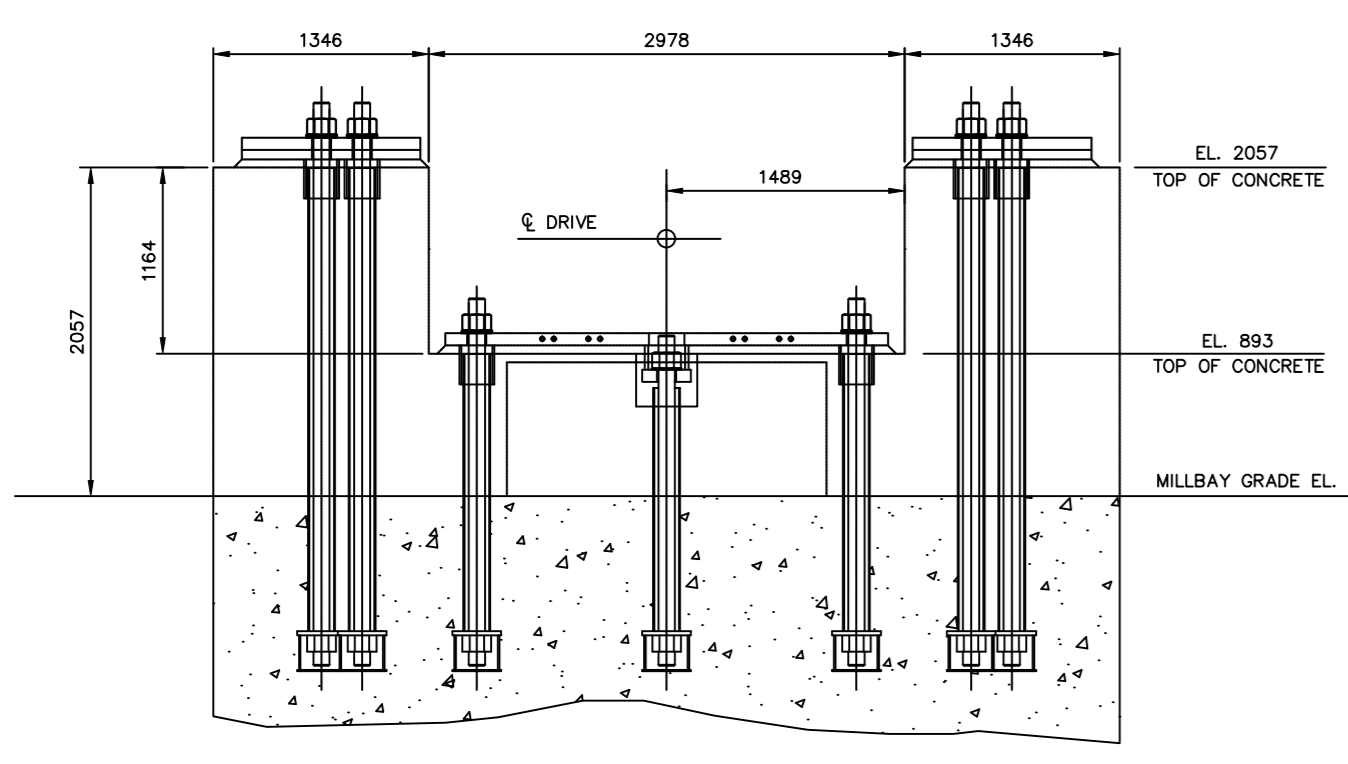
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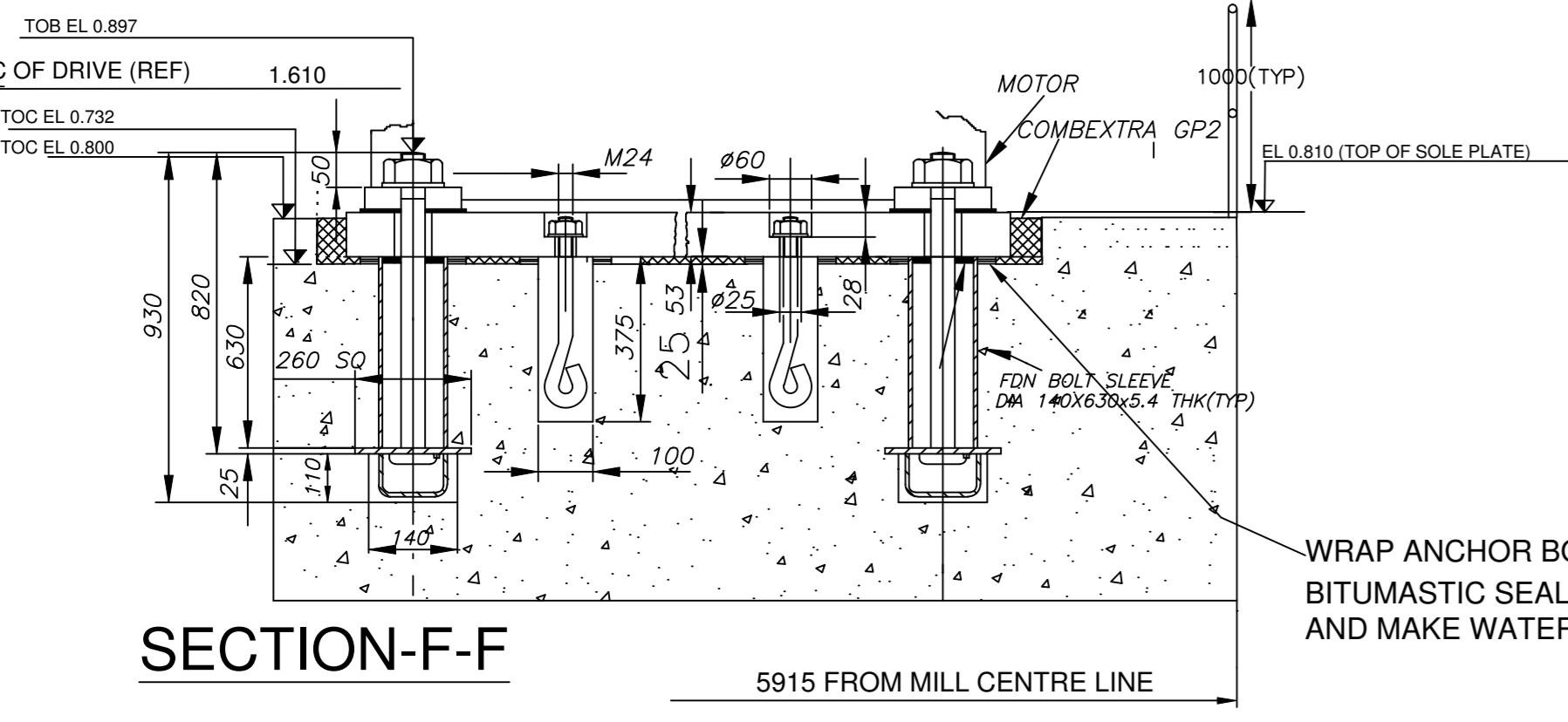
PULVERIZER EQUIPMENT ARRANGEMENT TYPICAL 9 PLACES



SECTION "A-A"



VIEW P



SECTION-F-F

WRAP ANCHOR BOLTS WITH BITUMASTIC SEALING COMPOUND AND MAKE WATER TIGHT

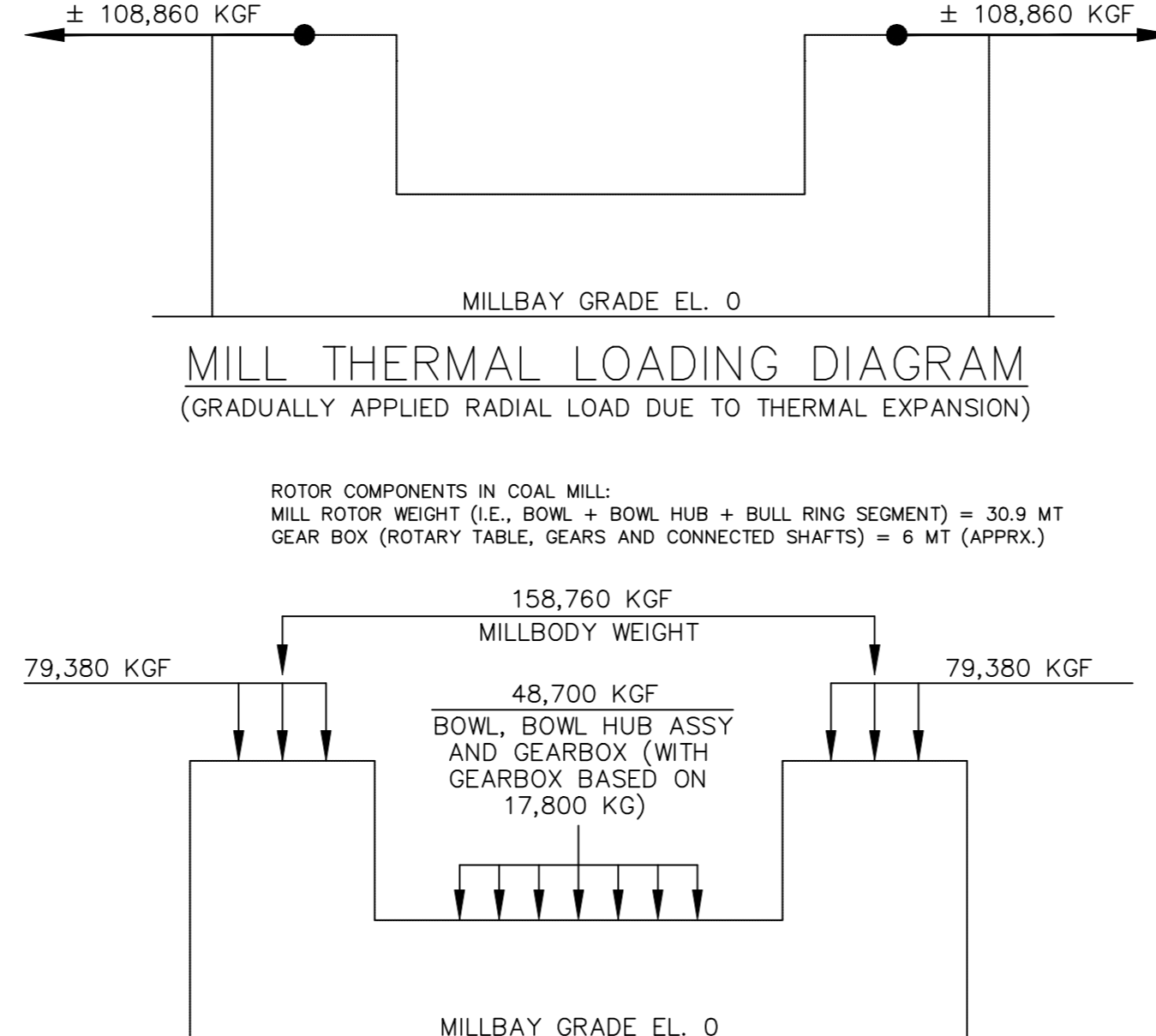
PLAN OF MOTOR FOUNDATION SHOWING GROUT AND ELEVATION DETAILS

LEGEND:
 ● - LOAD CENTER
 KGM. - KILOGRAM-METRE
 KGF. - KILOGRAM-FORCE
 ● C.G. - CENTER OF GRAVITY

FOUNDATION NOTES:

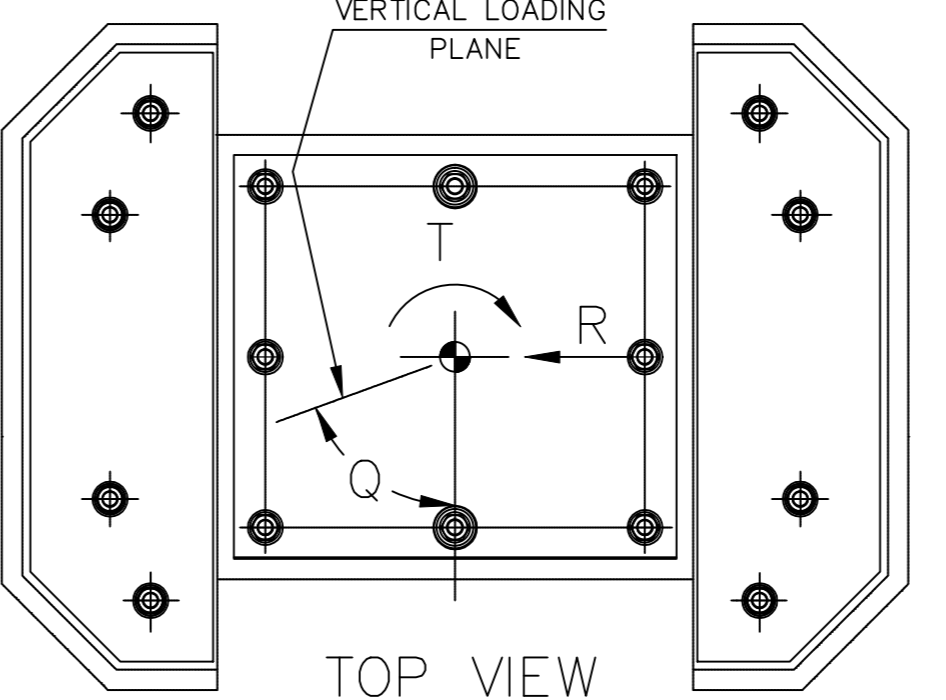
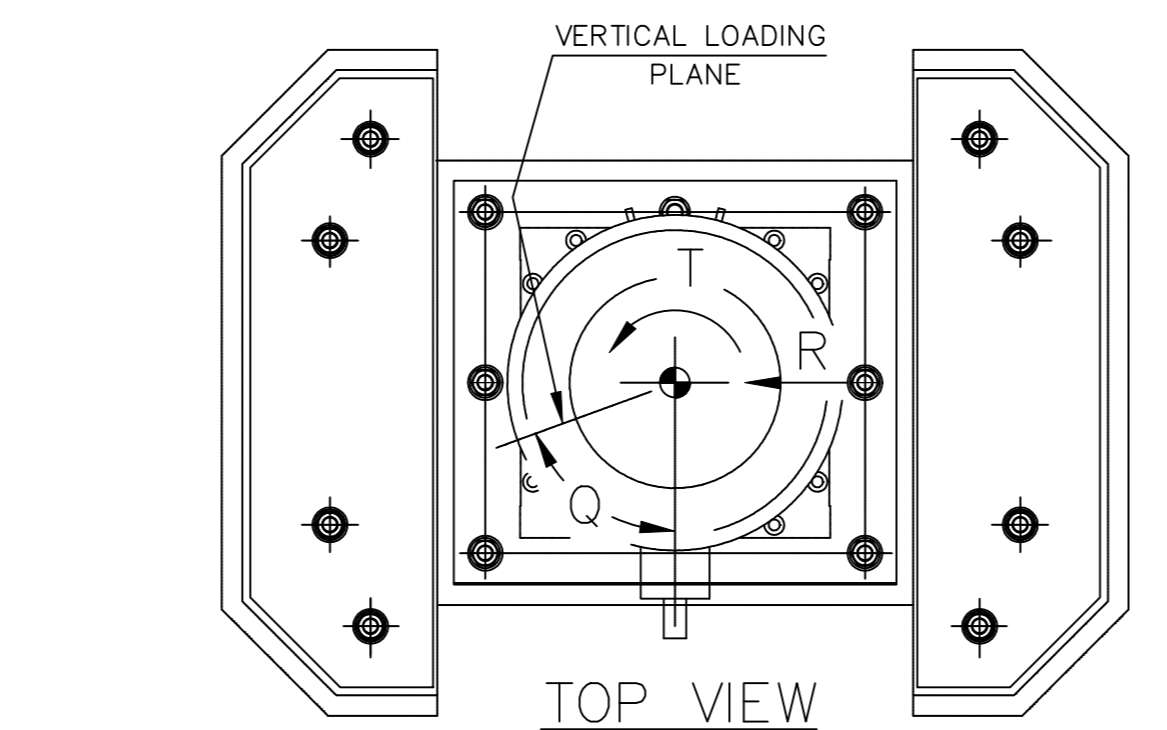
1. THE MASS OF CONCRETE MAKING UP THE FOUNDATION SHOULD BE NOT LESS 2.5 TIMES THE MASS OF THE PULVERISER. REFER IS:2974 FOR GUIDELINES.
2. PULVERISER AND PULVERISER MOTOR FOUNDATIONS MUST BE ONE HOMOGENEOUS BODY.
3. ALL ANCHOR BOLTS ARE TO BE SET IN PIPE SLEEVES PER SECTIONS "B-B", "C-C" AND "D-D". SLEEVES MUST BE FREE OF WATER, DIRT, GROUT AND OTHER DEBRIS AND SEALED WATER AND DUST TIGHT AT THE TOP WITH OAKUM OR OTHER SUITABLE MATERIAL. SEAL MUST ALLOW ANCHOR BOLT TO ELONGATE WHEN TENSIONED. ANCHOR BOLTS ARE TO BE WELDED AS SHOWN TO PREVENT ROTATION.
4. FOR REQUIRED CLEARANCES AROUND PIERS SEE BOWL MILL ARRANGEMENT DRAWING E-PLVE-1693.(NTPC: 9549-102-PVM-B-003/BHEL: 00062087035).
5. ANCHOR BOLT SIZING AND PRELOADING IS BASED ON ANCHOR BOLT MATERIAL OF ASTM A-36. ANCHOR BOLT THREADS TO BE IN ACCORDANCE WITH ISO 68 AND ISO 724 FOR M100X6 THREAD.
6. ALL ANCHOR BOLT NUT AND WASHER DIMENSIONS TO BE PER DETAIL "E". NUTS AND WASHERS BE MADE OF A MATERIAL THAT HAS STRENGTH PROPERTIES EQUAL OR GREATER THAN ANCHOR BOLTS.
7. ANCHOR BOLTS SHALL BE WITHIN 5 MM OF THEIR DESIGN LOCATION AT THE TOP OF THE BOLT AND VERTICAL WITHIN 0.4 / 305 MM.
8. THE CONCRETE SURFACES TO BE GROUTED ARE TO BE ROUGHENED TO EXPOSE SOUND AGGREGATE. THE SURFACE PROFILE SHOULD HAVE A ROUGHNESS OF 6 TO 13 MM (PEAK TO VALLEY MEASUREMENT). THIS CAN BE DONE BY USING A NAIL RAKE PRIOR TO THE CONCRETE FULLY CURING OR AFTER THE CONCRETE HAS CURED BY CHIPPING.
9. ALLOWABLE VERTICAL RIGID BODY FOUNDATION DEFLECTION (SETTLING, START-UP, STEADY-STATE AND SHUT DOWN): 3MM MAXIMUM.
10. ALLOWABLE FOUNDATION BENDING AND TWISTING (SETTLING, START-UP, STEADY-STATE AND SHUT DOWN): 0.13MM PER 3048MM.
11. MAXIMUM ALLOWABLE PIER DEFLECTION:
 - UNISON MOVEMENT ±0.38MM @ TOP OF PIER
 - OPPOSITE MOVEMENT ±0.38MM @ TOP OF PIER
12. ANCHOR BOLT DESIGN WAS BASED ON A MINIMUM HORIZONTAL DISTANCE TO THE NEAREST EDGE OF THE FOUNDATION OF 380MM AT THE ELEVATION OF THE BOTTOM OF PEDESTAL. THE DESIGN WAS DONE IN ACCORDANCE WITH ACI-318 APPENDIX D.
13. FOUNDATION TO BE DESIGNED DYNAMICALLY AS PER IS:2974 GUIDELINES
14. BALANCE QUALITY GRADE FOR COAL MILL IS 06.3 AS PER IS/ISO 1940

MAXIMUM DYNAMIC FOUNDATION LOADING (ACTUAL)	
MOMENT [M]	1.843 X 10 ⁵ KG-M.
THRUST [TH]	2.181 X 10 ⁵ KGF.
RADIAL [R]	5.048 X 10 ⁴ KGF.
TORQUE [T]	1.787 X 10 ⁵ KG-M.
ANGLE [Q]	0° THRU 360° RANDOM DIRECTION SEE NOTE #2
TORQUE [Tm]	PEAK TORQUE

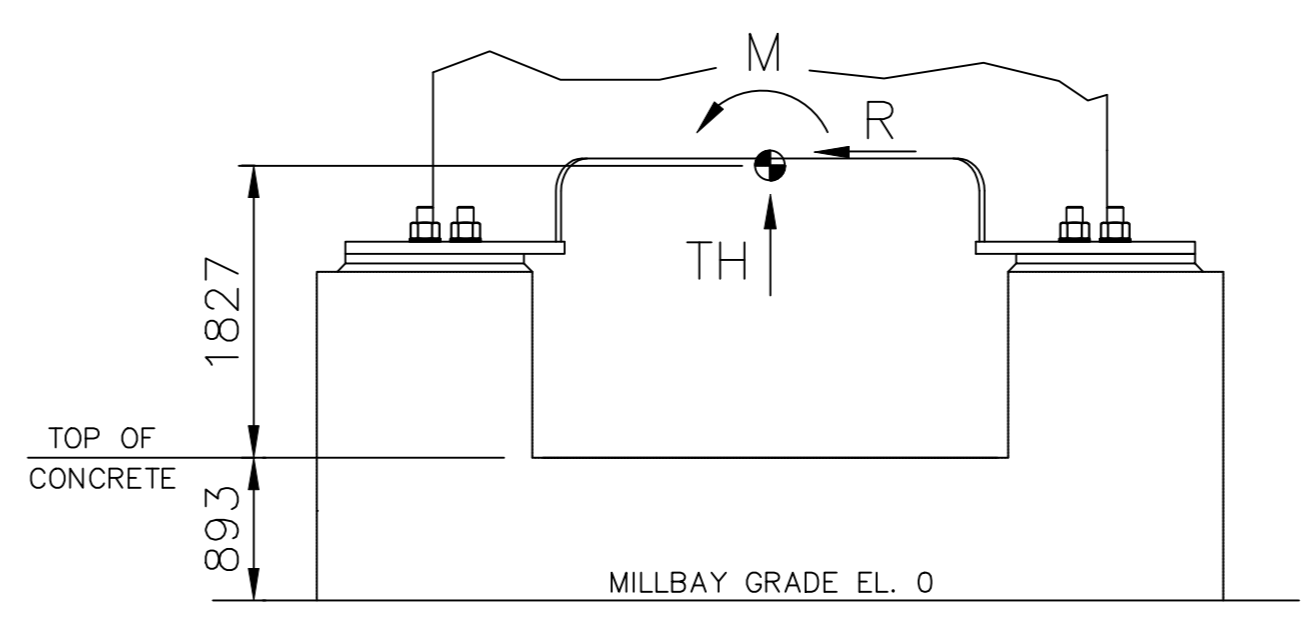


MILL THERMAL LOADING DIAGRAM

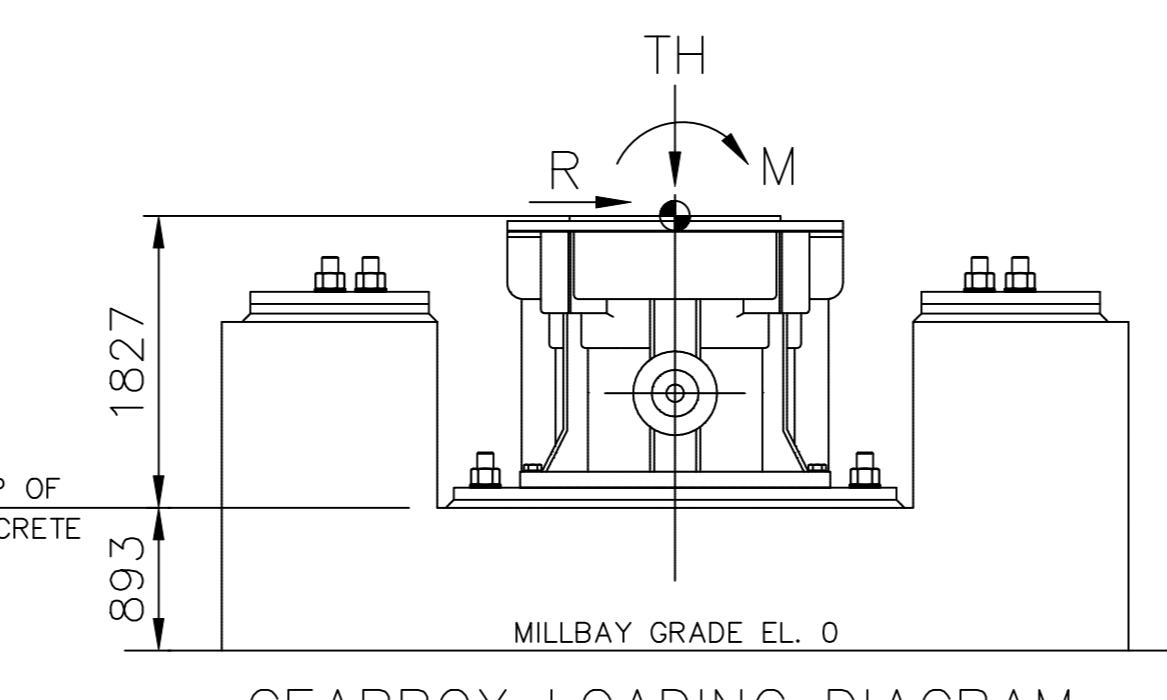
MILL STATIC LOADING DIAGRAM



TOP VIEW



MILLBODY LOADING DIAGRAM



GEARBOX LOADING DIAGRAM

NOTES:

1. ALL DYNAMIC LOADS ARE IN ADDITION TO THE STATIC LOADS.
2. THE MOMENT [M] AND RADIAL FORCE [R] COULD OCCUR IN ANY VERTICAL PLANE - I.E. THE ANGLE "Q" RANGES FROM 0° TO 360° PER THE DIAGRAM.
3. MASS OF PULVERISER 1,91,860 KGS (EXCLNG GEARBOX) & GEARBOX IS 17,800 KGS.

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