

Depth of foundation (m), H					
S.No.	Foundation code	Vertical Load (kg)	Bending Moment (kg-m)	Diameter d (m)	Implantation (3.0 m to 5.0 m)
1	4105 P	4000	10500	1.8	2.5
2	4115 P	4000	11500	1.8	2.6
3	4125 P	4000	12500	1.8	2.7
4	4135 P	4000	13500	1.8	2.8
5	4145 P	4000	14500	1.8	2.9
6	4155 P	4000	15500	1.8	3.0
7	4165 P	4000	16500	1.8	3.1
8	4175 P	4000	17500	1.8	3.2
9	4185 P	4000	18500	1.8	3.3
10	4195 P	4000	19500	1.8	3.3
11	4205 P	4000	20500	1.8	3.4
12	4215 P	4000	21500	1.8	3.5
13	4225 P	4000	22500	1.8	3.6
14	4235 P	4000	23500	1.8	3.6
15	4245 P	4000	24500	1.8	3.7
16	4255 P	4000	25500	1.8	3.8
17	4260 P	4000	26000	1.8	3.8
18	4265 P	4000	26500	1.8	3.8
19	4270 P	4000	27000	1.8	3.9
20	4275 P	4000	27500	1.8	3.9
21	4280 P	4000	28000	1.8	3.9
22	4285 P	4000	28500	1.8	4.0
23	4290 P	4000	29000	1.8	4.0
24	4295 P	4000	29500	1.8	4.0
25	4300 P	4000	30000	1.8	4.1
26	5105 P	5000	10500	1.8	2.5
27	5115 P	5000	11500	1.8	2.6
28	5125 P	5000	12500	1.8	2.7
29	5135 P	5000	13500	1.8	2.8
30	5145 P	5000	14500	1.8	2.9
31	5155 P	5000	15500	1.8	3.0
32	5165 P	5000	16500	1.8	3.1
33	5175 P	5000	17500	1.8	3.2
34	5185 P	5000	18500	1.8	3.3
35	5195 P	5000	19500	1.8	3.3
36	5205 P	5000	20500	1.8	3.4
37	5215 P	5000	21500	1.8	3.5
38	5225 P	5000	22500	1.8	3.6
39	5235 P	5000	23500	1.8	3.6
40	5245 P	5000	24500	1.8	3.7
41	5255 P	5000	25500	1.8	3.8
42	5260 P	5000	26000	1.8	3.8
43	5265 P	5000	26500	1.8	3.8
44	5270 P	5000	27000	1.8	3.9
45	5275 P	5000	27500	1.8	3.9
46	5280 P	5000	28000	1.8	3.9
47	5285 P	5000	28500	1.8	4.0
48	5290 P	5000	29000	1.8	4.0
49	5295 P	5000	29500	1.8	4.0

Depth of foundation (m), H					
S.No.	Foundation code	Vertical Load (kg)	Bending Moment (kg-m)	Diameter d (m)	Implantation (3.0 m to 5.0 m)
50	5300 P	5000	30000	1.8	4.1
51	6105 P	6000	10500	1.8	2.5
52	6115 P	6000	11500	1.8	2.6
53	6125 P	6000	12500	1.8	2.7
54	6135 P	6000	13500	1.8	2.8
55	6145 P	6000	14500	1.8	2.9
56	6155 P	6000	15500	1.8	3.0
57	6165 P	6000	16500	1.8	3.1
58	6175 P	6000	17500	1.8	3.2
59	6185 P	6000	18500	1.8	3.3
60	6195 P	6000	19500	1.8	3.3
61	6205 P	6000	20500	1.8	3.4
62	6215 P	6000	21500	1.8	3.5
63	6225 P	6000	22500	1.8	3.6
64	6235 P	6000	23500	1.8	3.6
65	6245 P	6000	24500	1.8	3.7
66	6255 P	6000	25500	1.8	3.8
67	6260 P	6000	26000	1.8	3.8
68	6265 P	6000	26500	1.8	3.8
69	6270 P	6000	27000	1.8	3.9
70	6275 P	6000	27500	1.8	3.9
71	6280 P	6000	28000	1.8	3.9
72	6285 P	6000	28500	1.8	4.0
73	6290 P	6000	29000	1.8	4.0
74	6295 P	6000	29500	1.8	4.0
75	6300 P	6000	30000	1.8	4.1

LEGEND	
SYMBOL	DESCRIPTION
P	PORTAL FOUNDATION

This drawing is the property of SOJITZ-L&T CONSORTIUM and must not be passed on to any person or body not authorized by SOJITZ-L&T in writing to receive it nor be copied or otherwise made use either in full or in part by such person or body without our prior permission in writing.

**NOTES-**

- DRAWING NOT TO BE SCALED AND ALL DIMENSIONS ARE IN METER UNLESS OTHERWISE SPECIFIED.
- THE CONCRETE SHALL HAVE MINIMUM 28 DAYS CHARACTERISTIC COMPRESSIVE CUBE STRENGTH FOR SEVERE EXPOSURE CONDITIONS:  
(A) FOUNDATION - M20  
(B) GROUTING - M20
- CLEAR COVER TO REINFORCEMENT SHALL BE 75mm.
- (A) THE DEPTH OF CYLINDRICAL FOUNDATION AS SHOWN IN THE TABLE ARE NOT SUITABLE IF:  
(i) SOIL DENSITY IS LESS THAN 1.5 T/M<sup>3</sup>.  
(B) THIS DRAWINGS OF CYLINDRICAL FOUNDATION IS NOT VALID FOR THE FOLLOWING SOIL TYPES:-  
(i) BLACK COTTON SOIL  
(ii) ROCK STRATA
- FOR DETAILED DESIGN REFER DOCUMENT NO. DOC/EMP-16/DGN/DC/073(REV-0).
- THIS DRAWING SHOULD BE READ IN CONJUGATION WITH DRAWING NO-5/OH/TD/1236(REV-A), SHEET 1 OF 2.
- CENTER LINE OF FOUNDATION AND CENTER LINE OF PORTAL NEED TO BE MATCHED BEFORE EXECUTION.
- THE CONSTRUCTION TOLERANCE OF ±10mm IN THE FOUNDATION WALLS THICKNESS IS ALLOWED BEFORE PORTAL GROUTING IS DONE. HOWEVER THE OVERALL DIAMETER OF FOUNDATION SHALL BE ENSURED TO 1800mm AFTER GROUTING OF PORTAL IS DONE.
- THIS DRAWING IS VALID ONLY WHEN A MINIMUM 300mm SOIL CUSHION IS AVAILABLE FROM OUTER EDGE OF FOUNDATION TO THE CREST OF FORMATION SLOPE AS SHOWN IN THE SKETCH.

PMC 2R		DFCCIL	
DESIGNATION	SIGNATURE	DESIGNATION	SIGNATURE
PM/PMC		CPM/DFCCIL	
CEE/ELECT.		ACPM/ELECT.	
DESIGN EXP		APM/ELECT	
ISSUED BY :-			
ENGINEERING DESIGN & RESEARCH CENTRE- ELECTRICAL, LARSEN & TOUBRO LIMITED		DEEPAK GUPTA HEAD OF DEPT. ELECTRICAL DESIGN	

REV. NO.	DATE	DESCRIPTION	SIGNATURE
A	16/01/2020	INITIAL SUBMISSION	

PROJECT : DEDICATED FREIGHT CORRIDOR PROJECT (WESTERN CORRIDOR, PACKAGE EMP 16 - JNPT TO MAKARPURA)

ORGANIZATION  
EMPLOYER: DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED

ENGINEER: PMC-2R O&B CONSORTIUM

CONTRACTOR: SOJITZ-L&T CONSORTIUM

CONSULTANT: Ardanuy ARDANUY INGENIERIA S.A.

TITLE : TYPICAL DETAILS OF CYLINDRICAL FOUNDATION FOR OHE PORTAL WITH 1.8m DIAMETER AT JNPT YARD

JOB No : WDFCC-EMP-16		SIZE	RELEASED FOR
SET	HEAD OF DEPT. ELECTRICAL DESIGN	PROJECTION	PRELIMINARY
DISGN AN	SIGN	NAME	INFORMATION
CHKD AK	APPD DEEPAK GUPTA	SCALE	REVIEW
VERI AK		FIRST ANGLE	CONSTRUCTION
		N.T.S.	AS BUILT

DWG. NO : 5 OH TD 1 2 3 6 REVISION SHEET NO. A 2 OF 2 DATE : 16/01/2020