Client Reference No.: MMP/1095/Kamalia/SEW/116/2025 Dated: 09-04-2025

SOM Lab Ref: CED/SOM/1094 **Dated:** 21-04-2025

Test Type: Load Test of RPC Manhole Cover 24" Diameter

Test Standard: Non-standard test was performed as per requirement of the client [Application of load at the center of the Manhole Cover through circular thick(19.0mm) steel plate of 377mm diameter]

Test Performed by: Dr. Asad Ali Gillani

.....

Muhammad Shafiq

Assistant Resident Engineer

PCP Pkg-III Kamalia, MM Pakistan

(Improvement of Sewerage System and Construction of Waste Water Treatment Plant-Kamalia City Package-1 Sewerage System)

This is with reference to your above-mentioned letter and SOM receipt No. 1094 dated: 21-04-2025. The sample of RPC Manhole Cover submitted in the Laboratory has been tested and the result is provided below.

Load Test Result

Diameter of Manhole Cover	Average Thickness of Manhole Cover	Maximum Load	Observations/Remarks
630 mm	70.6 mm	5400 kg	Manhole Cover was cracked at this load

Witnessed by: Qazi Abdul Majid (RE-MMP) MC Kamalia

Cap Muhammad Moeez Ali

Test Performed By:

Dr. /Engr.

Irfan Ul Hassan

for Comm Officer 765 Construction Team Engrs C/O Sigcen Lhr.(Lahore Ring Road SL-3 Project)

SOM Lab

Client Reference: 607/P Ref:

1087 (Page-1/1)

Dated: 21-04-2025 Dated:

21-04-2025

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615 Deformed Bar (Five Star

Gauge Length: 8 inch Sample Type:

Steel)

		D	ia.	A	rea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			п	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.608	8	0.988	0.79	0.766	22.83	37.46	63750	65750	104580	107860	1.50	8.0	18.8	
2	2.597	8	0.986	0.79	0.763	22.80	37.16	63660	65920	103730	107400	1.10	8.0	13.8	
3	1.508	6	0.751	0.44	0.443	13.46	20.29	67450	66990	101680	100990	1.30	8.0	16.3	
4	1.484	6	0.745	0.44	0.436	13.15	20.23	65910	66520	101420	102350	1.40	8.0	17.5	
5	0.663	4	0.498	0.20	0.195	5.96	9.12	65760	67450	100610	103190	0.90	8.0	11.3	
6	0.669	4	0.501	0.20	0.197	6.01	9.19	66320	67330	101390	102940	0.90	8.0	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	1		-	-	-	-	-	1	ı	-	
-	-	-	-	-	-	-	-	-	1	-	-	-	ı	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	Only Nine Samples
		Received and Tested

Rana Shafqat Rehman Khan Test Performed By: Dr. /Engr. Irfan Ul Hassan

PM Union Developers (Pvt) Ltd.(Const of LMDCTH)

SOM Lab

Client Reference: UA/SO/2025/07 Ref: 1088 (Page-1/1) Dated: 21-04-2025

Dated: 21-04-2025

Test:

Tension Test & Bend Test **Test Specification:** ASTM-A-615

8 inch Sample Type: Deformed Bar (Battla Steel) Gauge Length:

-	g	D:- A							20.0	(_ 0.11.0.		,		
		С)ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			Ē	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.465	6	0.741	0.44	0.431	14.48	18.93	72560	74070	94880	96870	1.20	8.0	15.0	l
2	1.474	6	0.743	0.44	0.433	15.31	19.52	76750	77990	97850	99430	1.20	8.0	15.0	1
3	0.654	4	0.494	0.20	0.192	7.44	9.17	82060	85480	101170	105380	0.90	8.0	11.3	
4	0.658	4	0.496	0.20	0.193	7.46	9.30	82290	85270	102520	106240	0.90	8.0	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
BE	ND TE	ST:													
	# 6	Samp	le bend	through	180 de	grees Sa	atisfactorily	without a	ny crack		Note:	_			
	# 4	Samp	le bend	through	า 180 de	grees Sa	atisfactorily	without a	ny crack						
											Only S Receiv				d

Lt. Col ® Muhammad Ibrahim

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

Snr Estate Engr Sundar Industrial Estate.(Construction of Security Check Posts at SIE)

SOM Lab

Client Reference: BOM/SIE/BCD 4-25/690

8 inch

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Ref: 1089 (Page-1/1) **Dated:** 21-04-2025

Dated: 18-04-2025

Gauge Length:

Dated:ASTM-A-615

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615 **Sample Type:** Deformed Bar (Moiz Steel)

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			L	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.583	4	0.467	0.20	0.171	5.88	7.67	64860	75860	84530	98870	1.40	8.0	17.5	
2	0.581	4	0.467	0.20	0.171	5.81	7.61	64080	74940	83970	98210	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-		-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	ı	=	-	ı	-	-	-	-	-	1	
BE	ND TE	ST:													
		No Be	end test	perforr	ned						Note:	_			
											Only 1	wo S	Sam	ples	
											Recei				d

Supervisor Engineer Test Performed By: Dr. /Engr. Asad Ali Gillani

Health Component- PHCIP Lahore.(Burial PIT Construction)

SOM Lab

Client Reference: PIU-H/PHCIP/PM/788 Ref: 1090 (Page-1/1) Dated: 21-04-2024

Dated: 14-04-2025

Test:

Tension Test & Bend Test **Test Specification:** ASTM-A-615 Gauge Length: 8 inch Sample Type: **Deformed Bar**

		D	ia.	А	rea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			_	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.656	4	0.496	0.20	0.193	6.68	8.66	73630	76300	95550	99010	1.20	8.0	15.0	
2	0.655	4	0.494	0.20	0.192	6.73	8.77	74190	77280	96670	100700	1.40	8.0	17.5	
3	0.656	4	0.496	0.20	0.193	6.65	8.69	73290	75950	95770	99250	1.30	8.0	16.3	
4	0.655	4	0.494	0.20	0.192	6.68	8.72	73630	76700	96110	100120	1.30	8.0	16.3	
5	0.654	4	0.494	0.20	0.192	6.63	8.61	73070	76110	94990	98940	1.20	8.0	15.0	
6	0.656	4	0.496	0.20	0.193	6.90	8.94	76100	78860	98580	102160	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	ı	-	-	-	-	ı	-	1	-	-	-	ı	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
BE	ND TE	ST:													
		No Be	end test	perforr	ned						Note:	•			
											Only S Receiv				d

Khadim Hussain Test Performed By: Dr. /Engr. Irfan Ul Hassan

Apex Construction & Co.(83-E-1 Commercial Building Gulberg Lahore)

SOM Lab

 Client Reference:
 Nil
 Ref:
 1091 (Page-1/1)

 Dated:
 21-04-2025
 Dated:
 21-04-2025

Test:Tension Test & Bend TestTest Specification:ASTM-A-615Gauge Length:8 inchSample Type:Deformed Bar

		D	ia.	А	rea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			u	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.636	8	0.993	0.79	0.775	24.77	38.33	69160	70490	107000	109070	1.40	8.0	17.5	
2	1.447	6	0.736	0.44	0.425	14.27	18.88	71540	74060	94630	97970	1.30	8.0	16.3	
3	0.654	4	0.494	0.20	0.192	5.98	8.92	65990	68740	98360	102460	0.90	8.0	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-		-	-	-	ı	ı	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	ı	-	
						•									

BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	Only Six Samples
		Received and Tested

Syed Talal Tariq Test Performed By: Dr. /Engr. Asad Ali Gillani

SPM IK Associates.(Const Of HMB Building Jail Road Faisalabad)

SOM Lab

Client Reference: Ref: 1092 (Page-1/1) IKAN/HMB/S.T/02/2025 Dated: 21-04-2025

Dated: 21-04-2025

Test:

Tension Test & Bend Test **Test Specification:** ASTM-A-615 Gauge Length: 8 inch Sample Type: Def. Bar

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress			n	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.535	6	0.758	0.44	0.451	14.22	19.80	71280	69540	99230	96810	1.30	8.0	16.3	
2	1.477	6	0.743	0.44	0.434	14.39	18.78	72150	73150	94120	95420	1.30	8.0	16.3	
3	1.044	5	0.625	0.31	0.307	10.65	14.24	75790	76530	101310	102300	1.30	8.0	16.3	
4	1.052	5	0.627	0.31	0.309	9.50	13.07	67590	67810	92970	93280	1.50	8.0	18.8	
-	-	-	-	-	-	=	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	=	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	=	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	=	-	-	-	-	-	-	-	-	
-	-	-	-	-	ı	=	-	-	1	-	-	-	ı	-	
-	-	ı	-	ı	ı	=	-	-	1	-	-	ı	ı	ı	
								-							

BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
# 5	Sample bend through 180 degrees Satisfactorily without any crack	
		Only Six Samples
		Received and Tested

Engr.Aziz Ur Rehman, ARE Test Performed By: Dr. /Engr. Asad Ali Gillani

ACE-Arts Limited, Net Zero Energy Building Gulbrg III Lahore.

SOM Lab

Client Reference: NZEB/ACE/LAB/2025/38 Ref: 1093 (Page-1/1) Dated: 21-04-2025

Dated: 21-04-2025

Test: Tension Test & Bend Test **Test Specification:** ASTM-A-615

8 inch Sample Type: Deformed Bar (Karachi Steel) Gauge Length:

		D	ia.	А	rea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			_	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.610	8	0.988	0.79	0.767	26.35	34.78	73570	75770	97100	100010	1.50	8.0	18.8	
2	2.607	8	0.988	0.79	0.766	26.10	34.32	72850	75140	95820	98820	1.30	8.0	16.3	
3	1.479	6	0.744	0.44	0.435	15.57	20.64	78020	78920	103470	104660	1.10	8.0	13.8	
4	1.473	6	0.743	0.44	0.433	15.24	19.80	76390	77620	99230	100830	1.20	8.0	15.0	
5	0.643	4	0.491	0.20	0.189	5.98	9.12	65990	69830	100610	106460	0.90	8.0	11.3	
6	0.662	4	0.498	0.20	0.195	6.17	9.38	68010	69750	103420	106070	1.00	8.0	12.5	
-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	1	1	1	1	-	•	-	-	-	
	-		_												
BE	ND TE	ST:													
	# 9 Cample hand through 190 degrees Catisfactorily without any greek														

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	Only Nine Samples
		Received and Tested