



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

Ref: CED/TFL/05/36454

Dated: 21-05-2021

Dated of Test: 25-05-2021

To
Resident Engineer-II
MM Pakistan (Pvt) Ltd
Enhancing Resilience of Right Embankment of Shujabad Branch from RD. 260+000
to Rd 279+000 against Seepage During High Floods in River Chenab

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]**

Reference to your letter No. DCRIP/RE-II/Shujbad/054, dated 20.05.2021

on the subject cited above. One R.C.C. Pipe as received by us has been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(foot)	(foot)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	12	7.65	6.91	1.32	0.98	2.08	11300	16500	3696	5397

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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To,
 Material Engineer
 GRC Pvt Ltd
 Construction of Pehur High Level Canal Extension Project, District Swabi (Lot-01- & Lot-02)
 Reference # CED/TFL **36455** (Dr. Qasim Khan) Dated: 21-05-2021
 Reference of the request letter # SAT/UET Lahore/05 Dated: 02-05-2021

Tension Test Report (Page – 1/2)

Date of Test 25-05-2021

Gauge length 2 inches

Description Steel Plate Steel Strip Tensile and Bend Test as per ASTM A-570

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
1	Steel Plate (1)	27.50x6.60	181.50	5700	7900	308.08	426.99	0.90	45.00	
2		27.60x6.60	182.16	5600	7900	301.58	425.44	0.80	40.00	
3	Steel Plate (2)	27.70x6.60	182.82	5800	8200	311.22	440.01	0.80	40.00	
4		27.70x6.60	182.82	5700	8100	305.86	434.64	0.70	35.00	
5	Steel Plate (3)	27.70x6.60	182.82	5500	8200	295.13	440.01	0.75	37.50	
6		27.70x6.60	182.82	5200	8000	279.03	429.27	0.70	35.00	
7	Steel Plate (4)	27.70x6.60	182.82	5500	8400	295.13	450.74	0.80	40.00	
8		27.70x6.60	182.82	5800	8500	311.22	456.10	0.80	40.00	
9	Steel Plate (5)	27.70x6.60	182.82	5900	8500	316.59	456.10	0.85	42.50	
10		27.70x6.60	182.82	5400	8000	289.76	429.27	0.70	35.00	
11	Steel Plate (6)	27.60x7.00	193.20	8300	11100	421.44	563.62	0.60	30.00	
12		27.60x7.00	193.20	8400	11100	426.52	563.62	0.60	30.00	

Only Twelve Samples for Tensile and Six Samples for Bend Test

Bend Test

Strip Taken from Steel Plate (1) Bend Test Through 180° is Satisfactory
 Strip Taken from Steel Plate (2) Bend Test Through 180° is Satisfactory
 Strip Taken from Steel Plate (3) Bend Test Through 180° is Satisfactory
 Strip Taken from Steel Plate (4) Bend Test Through 180° is Satisfactory
 Strip Taken from Steel Plate (5) Bend Test Through 180° is Satisfactory
 Strip Taken from Steel Plate (6) Bend Test Through 180° is Satisfactory

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To,
Material Engineer
GRC Pvt Ltd
Construction of Pehur High Level Canal Extension Project, District Swabi (Lot-01- & Lot-02)

Reference # CED/TFL **36455** (Dr. Qasim Khan)
Reference of the request letter # SAT/UET Lahore/05

Dated: 21-05-2021
Dated: 02-05-2021

Weight & Size Test Report (Page – 2/2)

Date of Test 25-05-2021
Description Steel Plate Weight and Size Test

Sr. No.	Designation	Weight	Length	Width (b)	Weight per Unit Area	Thickness	Remark
1	Steel Plate (1)	404	30.10	25.60	52.43	6.60	
2	Steel Plate (2)	408	30.20	25.60	52.77	6.60	
3	Steel Plate (3)	406	30.00	25.60	52.86	6.60	
4	Steel Plate (4)	413	30.40	25.70	52.86	60.60	
5	Steel Plate (5)	407	30.10	25.70	52.61	6.60	
6	Steel Plate (6)	439	30.10	25.70	56.75	6.70	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
Only Six Sample for Test							

I/C Testing Laboratories
UET Lahore, Pakistan.

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To,
M/S Precast Building System
Lahore

Reference # CED/TFL **36461** (Dr. Qasim Khan)
Reference of the request letter # P-4(A)/04/02/2021

Dated: 24-05-2021
Dated: 24-05-2021

Tension Test Report (Page – 1/1)

Date of Test 25-05-2021
Gauge length 640 mm
Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		% Elongation	Remarks/ Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)		
1	9.53 (3/8")	432.0	420.0	9100	89.27	10800	105.95	>3.50	xx
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
Only one sample for Test									

I/C Testing Laboratories
UET Lahore, Pakistan.

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To,
Resident Engineer
NESPAK – Zeeruk (Jv)
China Pakistan Economic Corridor (CPEC) - Western Route Hakla (on M1) to D.I. Khan
Motorway - Rehmani Khel to Kot Balian-Package-2C

Reference # CED/TFL **36464** (Dr. Qasim Khan)

Dated: 24-05-2021

Reference of the request letter # RE/NESPAK/P-2C/CPEC-WR/647

Dated: 24-04-2021

Tension Test Report (Page – 1/1)

Date of Test 25-05-2021

Gauge length 2 inches

Description Expansion Joint Steel Plate Steel Strip Tensile Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
1	Expansion Joint Steel Plate	15.80x8.70	137.46	5100	6700	363.97	478.15	0.65	32.50	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only One Samples for Tensile Test										
Bend Test										

I/C Testing Laboratoires
UET Lahore, Pakistan.

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