

Ref: CED/TFL/04/6828

Dated: 17-04-2025

Dated of Test: 25-04-2025

To

Assistant Engineer
Local Govt & Community Development
Civil Sub Division District Hafizabad
Missing Facilities Like Pavement of Streets, PCC, Construction of Drains,
Sewerage ETC. in UC No.3, 4 & 7 Tehsil & District Hafizabad.

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

Reference to your letter no: AE/LG/HFD/44 on dated: 03.02.2025 on the
subject cited above. Six R.C.C. Pipes 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)	(inch)	(inch)	(inch)	(inch)	(inch)	(kg)	(kg)	Lbs/Linear foot/foot	Lbs/Linear foot/foot
1	12	92.6	88.0	16.1	11.98	2.06	9500	13000	2861	3915
2	12	93.0	87.7	16.1	11.94	2.08	8500	12000	2577	3638
3	15	93.0	88.1	19.5	15.28	2.11	9000	12000	2122	2830
4	15	92.1	88.1	19.7	15.18	2.26	9500	13500	2255	3205
5	18	93.2	88.2	23.0	18.28	2.36	8500	11000	1674	2166
6	18	93.4	87.4	23.1	18.24	2.43	10500	14000	2091	2788

Test Performed and Verified by:

Ref: CED/TFL/04/6863

Dated: 24-04-2025

Dated of Test: 25-04-2025

To

Mr. Muzammal Hussain

Resident Engineer

Engineering Consultancy Services Punjab (Pvt.) Ltd.

"Program for Revamping of 220RHCs (Phase-I), Rural Health Centers of District Sialkot (Phase-I) ADP No: 363 for the Year (2024-25), R.H.C Village Kahlia & R.H.C Begowala"

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

Reference to your letter no: ECSP/RE/432/38 on dated 13.02.2025 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)	(inch)	(inch)	(inch)	(inch)	(inch)	(kg)	(kg)	Lbs/Linear foot/foot	Lbs/Linear foot/foot
1	9	93.6	88.1	11.2	9.06	1.07	4000	4500	1591	1790

Test Performed and Verified by:

To,
 Engr. Ahmed Jawad (Director Operators)
 Banu Mukhtar Product (Pvt.) Ltd.,
 FESCO, Faisalabad.

Reference # CED/TFL 6867 (Dr. M. Rizwan Riaz)
 Reference of the request letter # Nil

Dated: 24-04-2025
 Dated: 24-04-2025

Tension Test Report (Page – 1/1)

Date of Test 25-04-2025

Gauge length 600 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)	Young's Modulus of Elasticity	% Elongation	Remarks / Coil No.
	(mm)	(kg/1000m)	(kg/1000m)	(kg)	(kg)	E, GPa		
1	9.53 (3/8")	432.0	434.0	8700	9600	198	>3.50	xx
2	9.53 (3/8")	432.0	434.0	8800	9600	199	>3.50	xx
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
Only Two Samples for Test								

Note:

1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM – A416a
2. Load versus percentage strain graphs are attached

Test Performed and Verified by:

To,

Capt. (R) Muqet Tahir Malik
SJ Steel

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Reference # CED/TFL 6880 (Dr. Rizwan Riaz)
Reference of the request letter # Nil

Dated: 25-04-2025
Dated: 25-04-2025

Tension Test Report (Page-1/1)

Date of Test 25-04-2025

Gauge Length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kN)	Breaking Load (kN)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.380	3	0.377	0.110	0.112	37.50	55.70	76609	75543	113790	112206	0.7	8.8	-
2	0.376	3	0.375	0.110	0.11	37.70	55.70	77017	76681	113790	113292	0.8	10.0	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 1 Samples for Bend test														

Bend Test														
# 3 Bar Bend Test Through 180 Degree is Satisfactory														

Test Performed and Verified by: