To,

Mr. Mushtaq Ahmed (Assistant Director Technical)
Anti-Corruption Establishment, Sargodha Region, Sargodha
Enquiry No.78/2024 (KHB)

Reference # CED/TFL **7377** (Dr.M. Kashif) Dated: 15-08-2025
Reference of the request letter # ACE-SR-2025/4584 Dated: 05-05-2025

Tension Test Report (Page -1/2)

Date of Test 20-08-2025
Gauge length 600 mm
Description Steel Strand Tensile Test as per ASTM A-416

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/1000m)	(kg/1000m)	(kg)	(kN)	(kg)	(kN)	GPa		
1	**12.70 (1/2")**	**780.0**	**779.0**	**18300**	**179.52**	**19700**	**193.26**	**200**	**>3.50**	**-**
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Only one sample 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

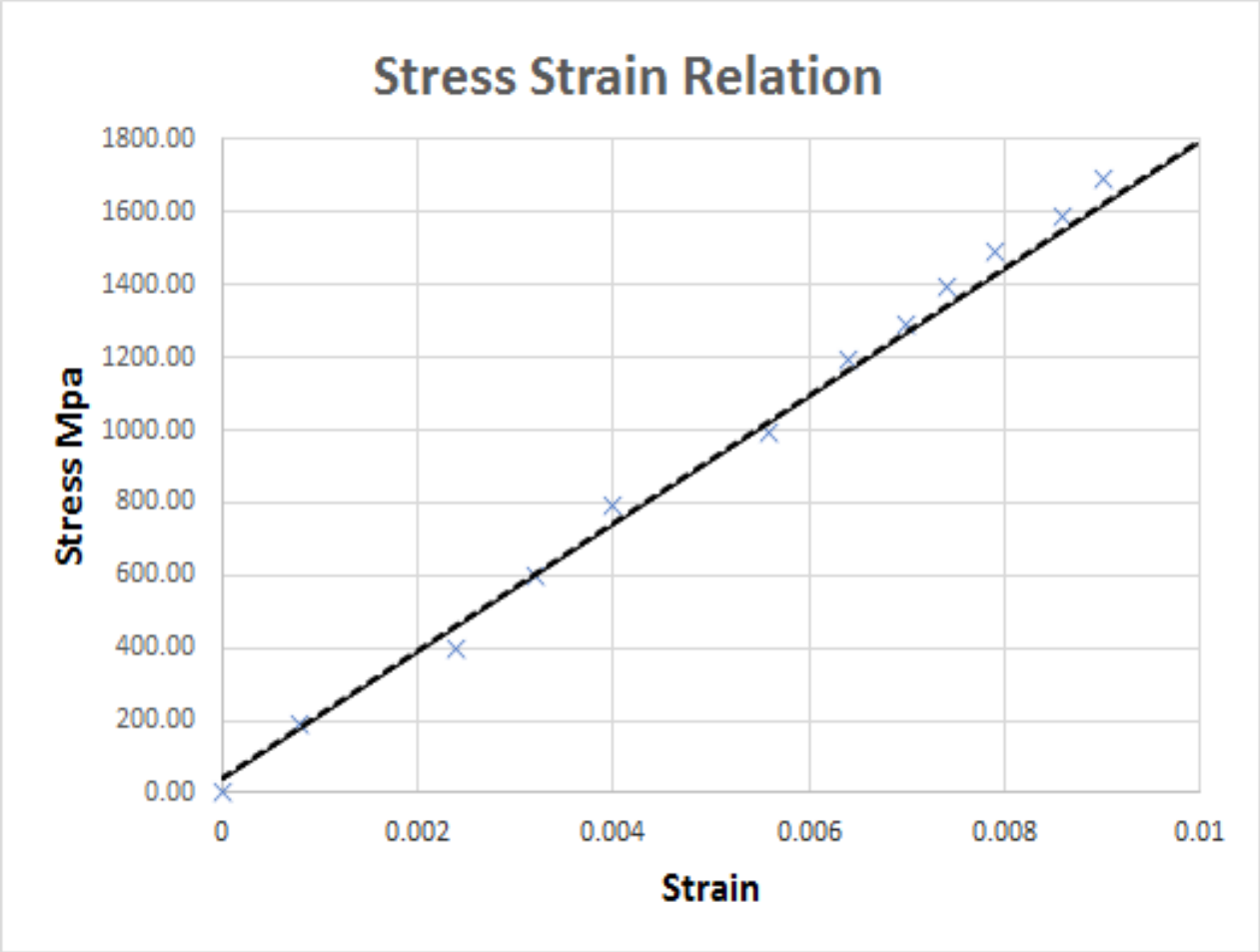
Test Performed and Verified by:

To,

Mr. Mushtaq Ahmed (Assistant Director Technical)
Anti-Corruption Establishment, Sargodha Region, Sargodha
Enquiry No.78/2024 (KHB)

Reference # CED/TFL **7377** (Dr.M. Kashif) Dated: 15-08-2025
Reference of the request letter # ACE-SR-2025/4584 Dated: 05-05-2025

Graph (Page – 2/2)



Test Performed and Verified by:

To,

Mr. Kashif Shahzad (Manager-Technical)
Gharibwal Cement Ltd.
-

Reference # CED/TFL **7378** (Dr. M Kashif) Dated: 18-08-2025
Reference of the request letter # GCL/Purchase/UET/010 Dated: 15-08-2025

Tension Test Report (Page-1/2)

Date of Test 20-08-2025
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 (mm)	Actual Diameter (inch)	Area (in^2)		Yield Load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	4.105	32	1.239	1.250	1.206	35200	59800	62065	64310	105439	109253	1.5	18.8	H # 202
2	4.154	32	1.247	1.250	1.221	36200	59800	63828	65366	105439	107980	1.4	17.5	H # 202
3	4.215	32	1.256	1.250	1.239	35400	59600	62417	62987	105087	106047	1.4	17.5	H # 203
4	4.246	32	1.260	1.250	1.248	35400	60000	62417	62529	105792	105982	1.3	16.3	H # 203
5	4.144	32	1.245	1.250	1.218	35400	54000	62417	64076	95213	97743	1.3	16.25	H # 262
6	4.058	32	1.232	1.250	1.193	35600	54000	62770	65795	95213	99801	1.5	18.75	H # 262
Note: Only 6 Samples for Tensile and 3 Samples for Bend test														

Bend Test
32mm Bar Bend Test Through 180 Degree is Satisfactory
32mm Bar Bend Test Through 180 Degree is Satisfactory
32mm Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Mr. Kashif Shahzad (Manager-Technical)
Gharibwal Cement Ltd.
-

Reference # CED/TFL **7378** (Dr. M Kashif) Dated: 18-08-2025
Reference of the request letter # GCL/Purchase/UET/010 Dated: 15-08-2025

Tension Test Report (Page-2/2)

Date of Test 20-08-2025
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 (mm)	Actual Diameter (inch)	Area (in^2)		Yield Load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
7	4.122	32	1.242	1.250	1.211	35600	53400	62770	64782	94155	97174	1.4	17.5	H # 700
8	4.112	32	1.240	1.250	1.208	35600	52600	62770	64931	92744	95938	1.4	17.5	H # 700
9	4.154	32	1.247	1.250	1.221	35400	63200	62417	63913	111434	114104	1	12.5	H # 761
10	4.168	32	1.249	1.250	1.225	41200	77600	72644	74141	136824	139644	0.8	10.0	H # 761
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 4 Samples for Tensile and 2 Samples for Bend test

Bend Test
32mm Bar Bend Test Through 180 Degree is Satisfactory
32mm Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Director
Punjab Public Health Engineering Department, Lahore
Mega Sewerage Scheme City Liaqatpur District R.Y. Khan

Reference # CED/TFL **7381** (Dr. M. Kashif) Dated: 18-08-2025
Reference of the request letter # CEC Dated: 18-08-2025

Tension Test Report (Page -1/1)

Date of Test 20-08-2025
Gauge length 8 inches
Description Plain Steel Bar Tensile and Bend Test

Sr. No.	Weight	Diameter/ Size (#)		Area	Yield load	Breaking Load	Yield Stress (psi)	Ultimate Stress	Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual	(in^2)	(kN)	(kN)	(psi)	(psi)	(inch)		
1	0.083	2	0.176	0.024	-	7.50	-	69489	0.60	7.5	9”
2	0.078	2	0.171	0.023	-	11.50	-	112267	0.30	3.8	12”
3	0.068	2	0.160	0.020	-	6.20	-	69447	0.40	5.0	15”
4	0.084	2	0.177	0.025	-	9.20	-	84210	0.50	6.3	21”
-	-	-	-	-	-	-		- -	-	-	-
-	-	-	-	-	-	-		- -	-	-	-
Note: only four samples for tensile test											
Bend Test											

Test Performed and Verified by:

Ref: CED/TFL/08/7382 Dated: 18-08-2025

Dated of Test: 20-08-2025 (Dr. M. Kashif)

To

Assistant Director (QCD)
Wasa, Lahore.

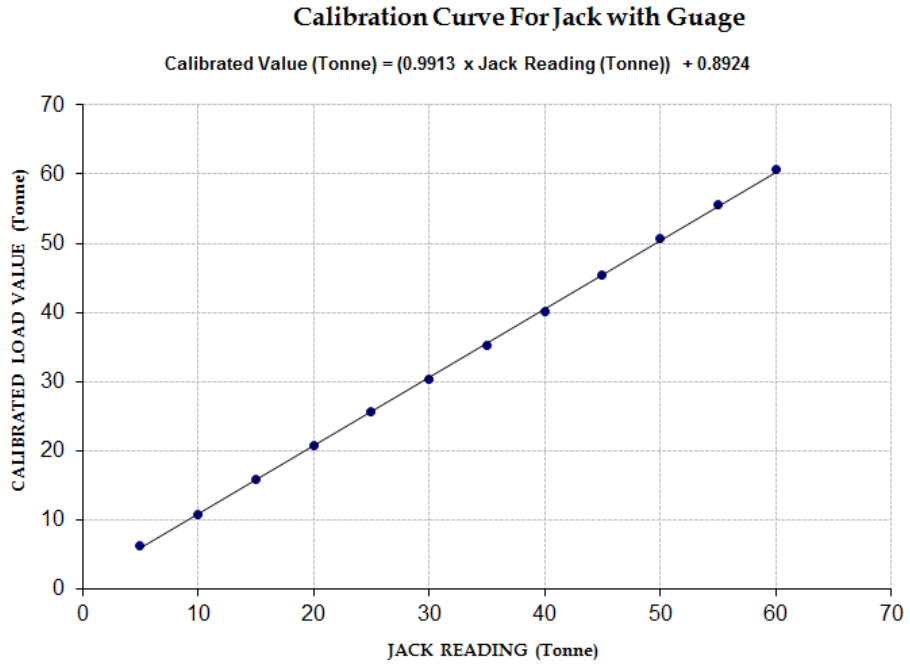
Subject: **- CALIBRATION OF HYDRAULIC JACK WITH GAUGE**
(MARK: TFL/08/7382) (Page-1/2)

Reference to your Letter No. QCD/3600, Dated: 12/08/2025 on the subject cited above. One Hydraulic Jack with Gauge as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 80 (Tonne)
Calibrated Range : Zero - 60 (Tonne)

Hydraulic Jack Reading (Tonne)		**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**50**	**55**	**60**
Calibrated Load	**(kg)**	**6200**	**10800**	**15800**	**20700**	**25700**	**30400**	**35200**	**40200**	**45500**	**50600**	**55600**	**60600**
	(Tonne)	**6.20**	**10.80**	**15.80**	**20.70**	**25.70**	**30.40**	**35.20**	**40.20**	**45.50**	**50.60**	**55.60**	**60.60**

1000 kg = 1 Tonne



Test Performed and Verified by:

Ref: CED/TFL/08/7382 Dated: 18-08-2025

Dated of Test: 20-08-2025 (Dr. M. Kashif)

To

Assistant Director (QCD)
Wasa, Lahore.

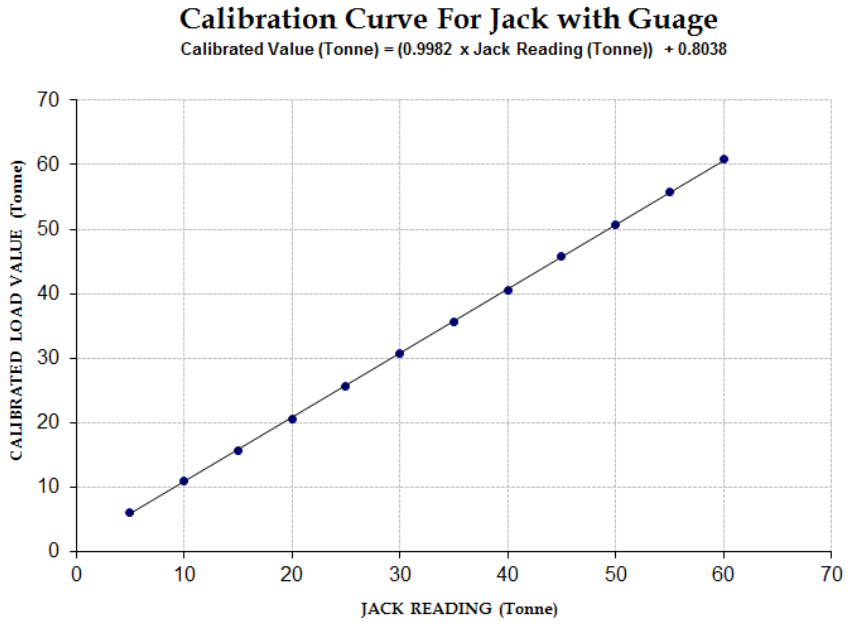
Subject: **- CALIBRATION OF HYDRAULIC JACK WITH GAUGE**
(MARK: TFL/08/7382) (Page-2/2)

Reference to your Letter No. QCD/3599, Dated: 12/08/2025 on the subject cited above. One Hydraulic Jack with Gauge as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 80 (Tonne)
Calibrated Range : Zero - 60 (Tonne)

Hydraulic Jack Reading (Tonne)		**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**50**	**55**	**60**
Calibrated Load	**(kg)**	**6050**	**10900**	**15750**	**20650**	**25650**	**30650**	**35600**	**40500**	**45800**	**50700**	**55750**	**60950**
	(Tonne)	**6.50**	**10.90**	**15.75**	**20.65**	**25.65**	**30.65**	**35.60**	**40.50**	**45.80**	**50.70**	**55.75**	**60.95**

1000 kg = 1 Tonne



Test Performed and Verified by:

To,

Major Muhammad Haris
Garrison Engineer (A)-II Gwa
CA No. CEA-CZ-72/2025-Const of DITS Bldg Tk VT-4 Gwa (M/S Haider Construction Services)

Reference # CED/TFL **7387** (Dr. M Kashif) Dated: 18-08-2025
Reference of the request letter # 6000-1157/21/E-6 Dated: 11-07-2025

Tension Test Report (Page-1/1)

Date of Test 20-08-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.367**	**3**	**0.370**	**0.110**	**0.108**	**29.70**	**43.70**	**60674**	**61922**	**89275**	**91110**	**1.4**	**17.5**	-
2	**0.367**	**3**	**0.371**	**0.110**	**0.108**	**29.20**	**43.50**	**59653**	**60785**	**88866**	**90554**	**1.2**	**15.0**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 0 Samples for Bend test														

Bend Test

Test Performed and Verified by:

To,

Lt. Col. Muhammad Foad Bashir Saeed ®
M/S DHA C
Const of Bridge on Hudiara Drain Link Between Phase-VII to Village Karbath
Witness by: (Mr. Ahmad Hassan and Mr. Muhammad Ilyas)

Reference # CED/TFL **7383** (Dr. Rizwan Riaz) Dated: 18-08-2025
Reference of the request letter # 408/241/32/Lab/18/158 Dated: 11-08-2025

Tension Test Report (Page -1/1)

Date of Test 20-08-2025
Gauge length 600 mm
Description Steel Strand Tensile Test as per ASTM A-416

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		% Elongation	Remarks / Coil No.
	(mm)	(kg/1000m)	(kg/1000m)	(kg)	(kN)	(kg)	(kN)		
1	**12.70 (1/2")**	**780.0**	**777.0**	**17700**	**173.64**	**19600**	**192.28**	**>3.50**	**xx**
2	**12.70 (1/2")**	**780.0**	**776.0**	**17700**	**173.64**	**19500**	**191.30**	**>3.50**	**xx**
3	**12.70 (1/2")**	**780.0**	**775.0**	**18000**	**176.58**	**19600**	**192.28**	**>3.50**	**xx**
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
Only three sample 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,

Resident Engineer
Vista Engineering Consultants & Designers
Rehabilitation of Janay Garai Khwar Bridge & Aladhand Khwar Bridge Tribal District Khyber

Reference # CED/TFL **7389** (Dr.M. Kashif) Dated: 19-08-2025
Reference of the request letter # C&W/VISTA/KHYBER/07 Dated: 01-08-2025

Tension Test Report (Page -1/4)

Date of Test 20-08-2025
Gauge length 600 mm
Description Steel Strand Tensile Test as per ASTM A-416

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/1000m)	(kg/1000m)	(kg)	(kN)	(kg)	(kN)	GPa		
1	**12.70 (1/2")**	**780.0**	**787.0**	**18200**	**178.54**	**19600**	**192.28**	**204**	**>3.50**	**-**
2	**12.70 (1/2")**	**780.0**	**787.0**	**17800**	**174.62**	**19500**	**191.30**	**196**	**>3.50**	**-**
3	**12.70 (1/2")**	**780.0**	**785.0**	**17700**	**173.64**	**19400**	**190.31**	**196**	**>3.50**	**-**
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Only three sample 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

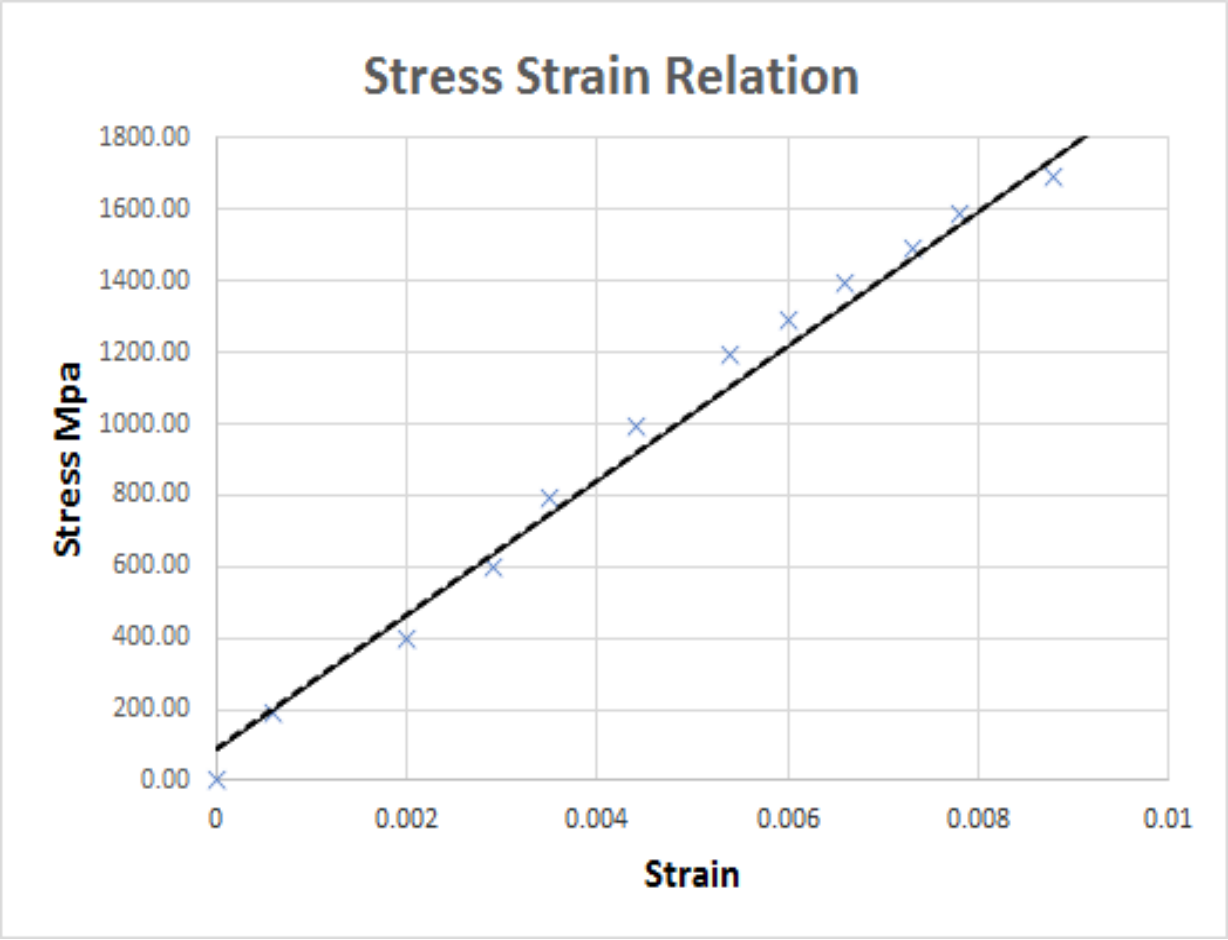
Test Performed and Verified by:

To,

Resident Engineer
Vista Engineering Consultants & Designers
Rehabilitation of Janay Garai Khwar Bridge & Aladhand Khwar Bridge Tribal District Khyber

Reference # CED/TFL **7389** (Dr.M. Kashif) Dated: 19-08-2025
Reference of the request letter # C&W/VISTA/KHYBER/07 Dated: 01-08-2025

Graph (Page – 2/4)



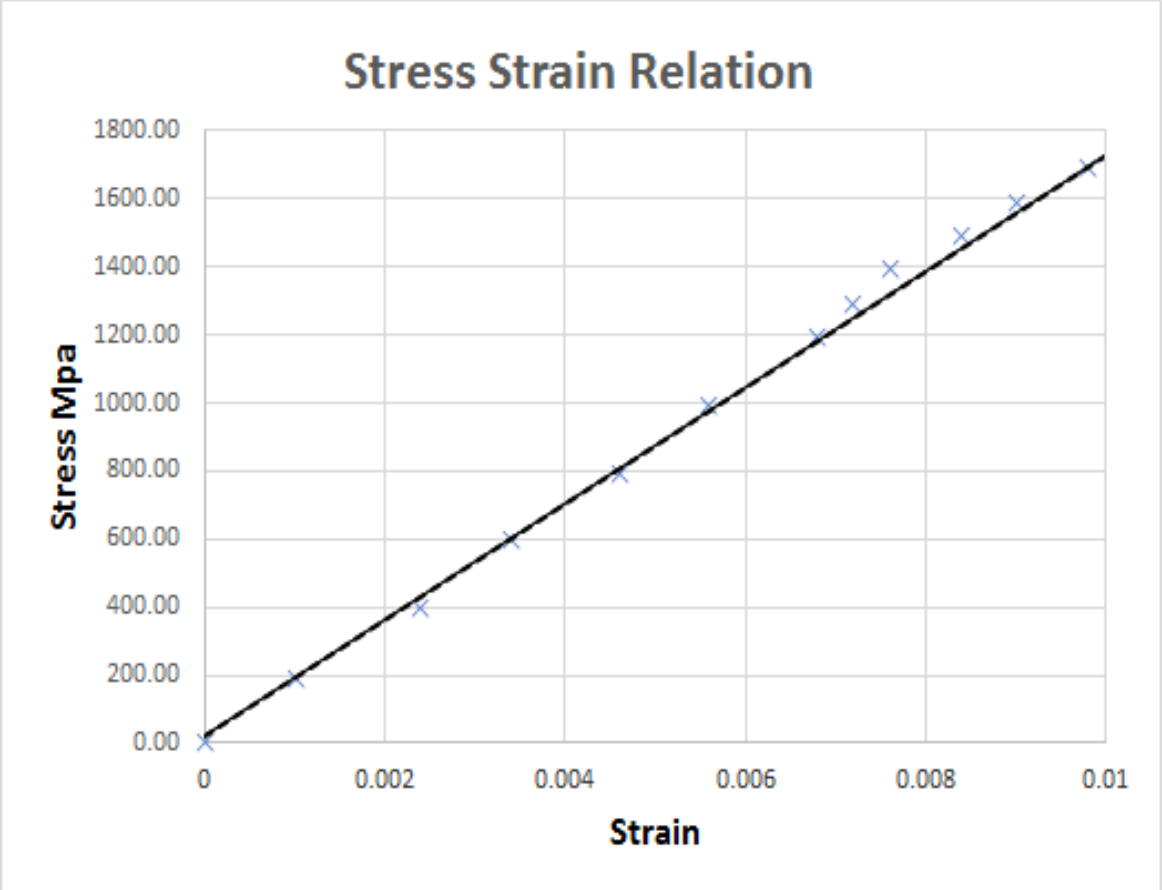
Test Performed and Verified by:

To,

Resident Engineer
Vista Engineering Consultants & Designers
Rehabilitation of Janay Garai Khwar Bridge & Aladhand Khwar Bridge Tribal District Khyber

Reference # CED/TFL **7389** (Dr.M. Kashif) Dated: 19-08-2025
Reference of the request letter # C&W/VISTA/KHYBER/07 Dated: 01-08-2025

Graph (Page – 3/4)



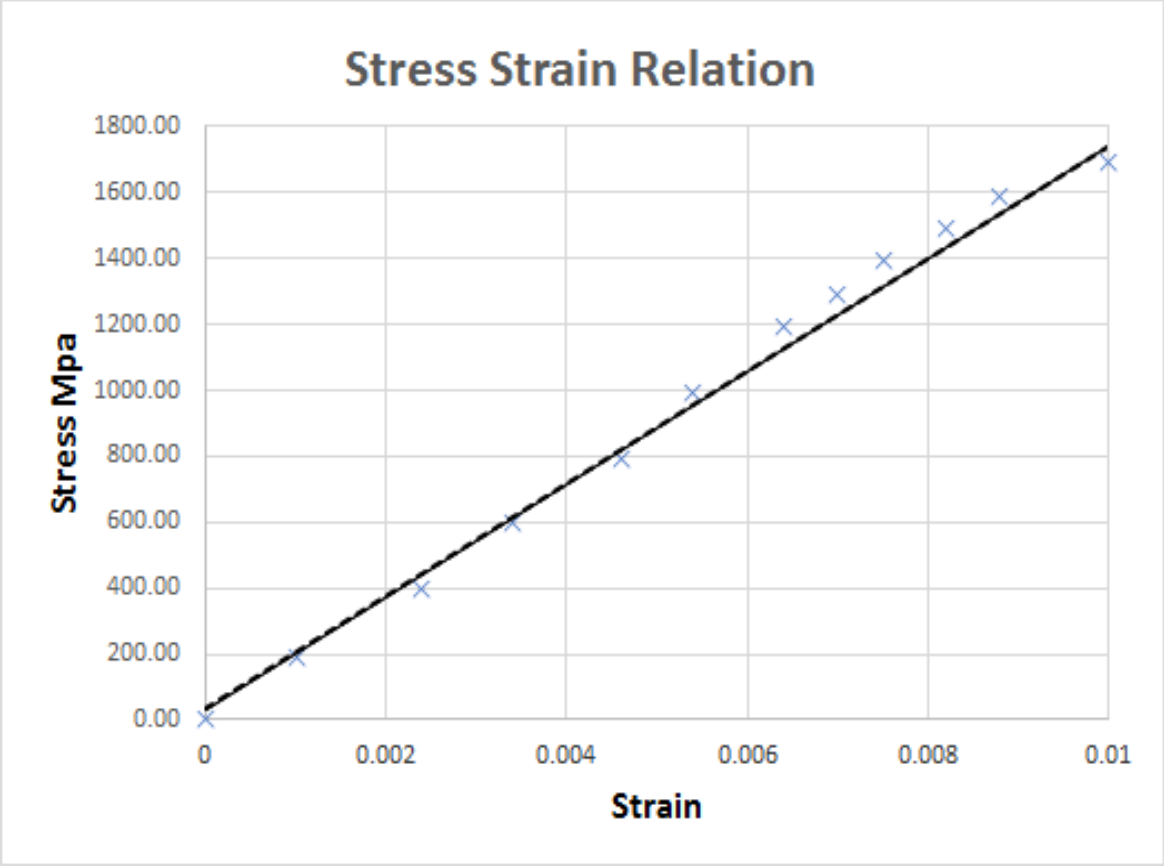
Test Performed and Verified by:

To,

Resident Engineer
Vista Engineering Consultants & Designers
Rehabilitation of Janay Garai Khwar Bridge & Aladhand Khwar Bridge Tribal District Khyber

Reference # CED/TFL **7389** (Dr.M. Kashif) Dated: 19-08-2025
Reference of the request letter # C&W/VISTA/KHYBER/07 Dated: 01-08-2025

Graph (Page – 4/4)



Test Performed and Verified by:

To,

Haris and Co. Engineering Concern (Pvt.) Ltd.
Jazz ID AHN8062, RUR1774, JGB8959, HWY2001, HWY7309, MLH8613, ISG8048
-

Reference # CED/TFL **7390** (Dr. M Kashif) Dated: 19-08-2025
Reference of the request letter # HC/No.28 Dated: 01-06-2025

Tension Test Report (Page-1/2)

Date of Test 20-08-2025
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 (mm)	Actual Diameter (inch)	Area (in^2)		Yield Load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.365**	**10**	**0.370**	**0.120**	**0.107**	**31.50**	**46.50**	**58989**	**65956**	**87079**	**97363**	**1.3**	**16.3**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 1 Samples for Tensile and 0 Samples for Bend test														

Bend Test

Test Performed and Verified by:

To,

Haris and Co. Engineering Concern (Pvt.) Ltd.
Ufone ID-2393, 2642, 4025
-

Reference # CED/TFL **7390** (Dr. M Kashif) Dated: 19-08-2025
Reference of the request letter # HC/No.28 Dated: 01-06-2025

Tension Test Report (Page-2/2)

Date of Test 20-08-2025
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 (mm)	Actual Diameter (inch)	Area (in^2)		Yield Load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.367**	**10**	**0.371**	**0.120**	**0.108**	**31.70**	**47.00**	**59363**	**66017**	**88015**	**97881**	**1.2**	**15.0**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 1 Samples for Tensile and 0 Samples for Bend test														

Bend Test

Test Performed and Verified by:

To,

AJ Contractors
Tawal Site ID: TWPSKP0016, TWPGRW0024
-

Reference # CED/TFL **7392** (Dr. M Kashif) Dated: 19-08-2025
Reference of the request letter # AJContractor/Steel/Tawal/26 Dated: 18-08-2025

Tension Test Report (Page-1/1)

Date of Test 20-08-2025
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 (mm)	Actual Diameter (inch)	Area (in^2)		Yield Load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.371	10	0.372	0.120	0.109	30.20	44.70	56554	62278	83708	92180	1.4	17.5	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 1 Samples for Tensile and 0 Samples for Bend test														

Bend Test

Test Performed and Verified by:

To,

Engr. Ahmed Hussain Shah (Resident Engineer)
New Vision Engineering Consultant
Construction of Auditorium Building (Block-F) at University of Child Health Sciences, Lahore
(AK Supreme Steel)

Reference # CED/TFL **7393** (Dr. M Kashif) Dated: 19-08-2025
Reference of the request letter # NEWVISION/UCHS/AUD/013 Dated: 18-08-2025

Tension Test Report (Page-1/1)

Date of Test 20-08-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.367**	**3**	**0.371**	**0.110**	**0.108**	**35.20**	**47.20**	**71910**	**73368**	**96425**	**98380**	**1.0**	**12.5**	-
2	**0.365**	**3**	**0.370**	**0.110**	**0.107**	**40.20**	**50.50**	**82125**	**84233**	**103166**	**105815**	**1.1**	**13.8**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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: