# LAMORE LAMORE

## STRUCTURAL ENGINEERING DIVISION

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

To, M/S Namco Associates (Pvt) Ltd Lahore (PCC Poles at Jahanian Pole Plant)

Reference # CED/TFL **35948** (Dr. M Rizwan Riaz) Dated: 18-01-2021 Reference of the request letter # NAMCO/UET/21/01 Dated: 15-01-2021

**Tension Test Report** (Page - 1/1)

Date of Test 22-01-2021 Gauge length 640 mm

Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield st clause		Breal strength (6.5	clause	Elongation	Remarks
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	%	1
1	9.53 (3/8")	432.0	440.0	10200	100.06	11000	107.91	>3.50	XX
2	9.53 (3/8")	432.0	451.0	10200	100.06	11100	108.89	>3.50	XX
3	11.11 (7/16")	582.0	596.0	13100	128.51	14400	141.26	>3.50	XX
4	11.11 (7/16")	582.0	596.0	12800	125.57	14300	140.28	>3.50	XX
-	-	-	-	•	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

Only four samples for Test

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

To, M/S Imperium Hospitality (Pvt) Limited Gulberg II, Lahore

Reference # CED/TFL **35963** (Dr. M Rizwan Riaz) Dated: 20-01-2021 Reference of the request letter # IHPL/Steel/043 Dated: 18-01-2021

**Tension Test Report** (Page -1/1)

Date of Test 22-01-2021 Gauge length 8 inches

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

Sr. No.	Weight			Ar (ir	rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
<b>S</b> 2	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	H %	Ŗ
1	3.946	10	1.215	1.27	1.160	39000	52200	67700	74120	90600	99200	1.50	18.8	eel
2	3.963	10	1.218	1.27			49800	63200	68870	86500	94300	1.30	16.3	PCS Steel
3	3.935	10	1.214	1.27	1.157	38600	51000	67000	73550	88600	97200	1.50	18.8	PC
-	-	-		-	-	-	-	-	-	-	-	-	-	
-	-	-	•	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Note: only thre				three:	samples	for tensil	e and one	e sample	for bend	test	I		
							D 1 T	4						
							Bend T	est						

#10 Bar Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
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## STRUCTURAL ENGINEERING DIVISION

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

To,
Resident Engineer / Team Leader
Prime Engineering Consultancy
Kallurkot Bridge Project

Construction of 4 Lane Bridge over River Indus Connecting Kallur Kot with D.I Khan

Reference # CED/TFL <u>35964 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # KK-DIK-BR-PJ/2021/230

Dated: 21-01-2021

Dated: 21-01-2021

**Tension Test Report** (Page – 1/3)

Date of Test 22-01-2021 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)			iking ngth e (6.2)	Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	GPa	<b>%</b>	Rema
1	12.70 (1/2")	775.0	782.0	17400	170.69	19800	194.24	199	>3.50	XX
2	12.70 (1/2")	775.0	781.0	18200	178.54	19900	195.22	199	>3.50	XX
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	•	-	-	-	-	1	
-	-	-	-	-	-	-	-	-	-	

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

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

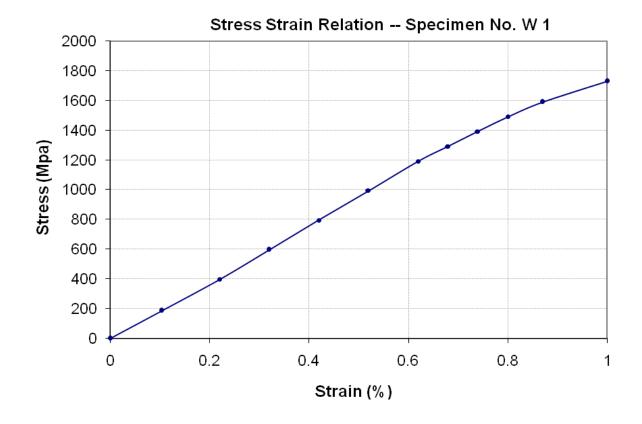
To,
Resident Engineer / Team Leader
Prime Engineering Consultancy
Kallurkot Bridge Project
Construction of 4 Lane Bridge over River Indus Connecting Kallur Kot with D.I Khan

Reference # CED/TFL <u>35964 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # KK-DIK-BR-PJ/2021/230

Dated: 21-01-2021

**Graph** (Page – 2/3)



I/C Testing Laboratoires UET Lahore, Pakistan.

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## STRUCTURAL ENGINEERING DIVISION

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

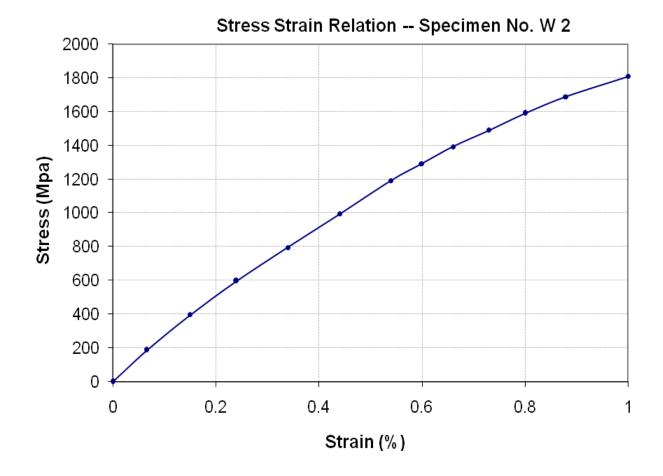
To,
Resident Engineer / Team Leader
Prime Engineering Consultancy
Kallurkot Bridge Project
Construction of 4 Lane Bridge over River Indus Connecting Kallur Kot with D.I Khan

Reference # CED/TFL <u>35964 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # KK-DIK-BR-PJ/2021/230

Dated: 21-01-2021

**Graph** (Page – 3/3)



I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To.

Assistant Executive Engineer-II CCD, Pak. PWD. Gujranwala

(Enhancement & Expansion of Building Infrastructure of NHMP Training College Sheikhupura,

Phase-I)(Sh: Establishment of Trainees Hostel)

Reference # CED/TFL <u>35968 (Dr. M Rizwan Riaz)</u>
Dated: 21-01-2021

Reference of the request letter # AEE-II/CCD/GA/Work/NHMP/P-I/Lab/18Dated: 19-01-2021

**Tension Test Report** (Page -1/1)

Date of Test 22-01-2021 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		Area (in²)  Vominal		Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks
S	(1J/sqI)	Nominal (#)	Actual (inch)	Nominal			(kg)	Nominal	Actual	Nominal	Actual	(inch)	∃%	Re
1	0.376	3	0.375	0.11	0.110	3100	4700	62200	61900	94200	93900	1.50	18.8	n
2	0.384	3	0.379	0.11			4700	62200	60530	94200	91800	1.40	17.5	Batala Premium
-	-	-	-	-	-	-	-	-	-	-	-	-	-	B. Pre
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test			
							Bend T	est						
#3	Bar Ben	d Test	Through	180° is	s Satisfa	ctory								

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

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## STRUCTURAL ENGINEERING DIVISION

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

To, GM Professional Construction Services (Pvt.) Ltd ABL Valencia Town Lahore

Reference # CED/TFL <u>35969 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # PCS/2021/Eng-07

Dated: 21-01-2021

**Tension Test Report** (Page -1/1)

Date of Test 22-01-2021 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight		neter/ ze	Aı (iı	rea n²)	Yield load	Breaking Load		Stress si)	Ultimat (p	e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#) (#) Actual (inch)		Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.384	3	0.379	0.11	0.113	3700	5000	74200	72250	100200	97700	0.90	11.3	
2	0.384	3	0.379	0.11	0.113	3600	4700	72200	70390	94200	91900	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					Not	e: only t	wo sampl	les for ter	nsile test	1				
							Bend T	'est						

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, Resident Engineer NESPAK

Establishment of U.E.T Lahore Sub Campus at Narowal – Construction of Electrical and

Mechanical Department (Balance Works)

Reference # CED/TFL <u>35970 (Dr. M Rizwan Riaz</u>)

Reference of the request letter # 3863/13/SYA/Labtsting/253

Dated: 21-01-2021

Dated: 20-01-2021

**Tension Test Report** (Page -1/1)

Date of Test 22-01-2021 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Actual Nominal		(inch)	<b>E</b> %	Re
1	0.380	3	0.377	0.11	0.112	4100	5500	82200	80810	110200	108500	0.80	10.0	
2	0.379	3	0.376	0.11	0.111	4100	5100	82200	81180	102200	101000	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test	ı		1
"2		1.00		10001	g c		Bend T	est						
#3	Bar Ben	d Test	Through	180° is	s Satisfa	ctory								

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To,
M/S Top Con (Private) Limited
Lahore
(Construction of Fabric Gowon at Kohinoor Mill)

Reference # CED/TFL <u>35972 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # TCL 102/2021

Dated: 21-01-2021

Dated: 21-01-2021

**Tension Test Report** (Page -1/1)

Date of Test 22-01-2021 Gauge length 8 inches

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

Sr. No.	Weight	Si	neter/ ize ch)		Area (in²)		Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal			(kg)	Nominal	Actual	Nominal	Actual	(inch)	₩ E	Re
1	0.378	3/8	0.376	0.11	0.111	3500	4600	70200	69380	92200	91200	0.90	11.3	
2	0.374	3/8	0.374	0.11			4700	72200	72120	94200	94200	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test	1		ı
3/8	" Dia Ra	ar Rend	Test Th	rough	180° is 9	Satisfacto	Bend T	'est						
3/8	Dia Ba	u bena	1est II	nougn	100 18 3	Saustacio	or y							

I/C Testing Laboratoires UET Lahore, Pakistan.

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

To, Construction Manager NESPAK

Establishment of Punjab Local Government Academy Building - Lahore

Reference # CED/TFL <u>35973 (Dr. M Rizwan Riaz</u>)

Reference of the request letter # 3976/13/MHK/01/187

Dated: 21-01-2021

Dated: 19-01-2021

**Tension Test Report** (Page -1/2)

Date of Test 22-01-2021 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	<b>3</b> %	R
1	0.366	3	0.370	0.11	0.108	3800	4700	76200	77810	94200	96300	0.90	11.3	
-	•	-	-	•	-	-	-	-	-	•	•	1	•	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	•	-	-	•	-	-	•	-	-	•	•	-	ı	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	sample fo	r tensile	and one	sample fo	or bend t	est			
							Bend T	'est						
#3	Bar Ben	d Test	Through	180° is	s Satisfa	ctory								

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, Construction Manager NESPAK

Establishment of Punjab Local Government Academy Building - Lahore

Reference # CED/TFL <u>35973 (Dr. M Rizwan Riaz</u>)

Reference of the request letter # 3976/13/MHK/01/189

Dated: 21-01-2021

Dated: 19-01-2021

**Tension Test Report** (Page -2/2)

Date of Test 22-01-2021 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		Area (in²)		Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal			(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	Re
1	4.229	10	1.258	1.27	1.243	45400	57000	78800	80500	99000	101100	1.50	18.8	
-	•	-	-	1	-	•	-	•	-	-	-	-	1	
-	•	•	-	1	-	•	-	•	-	-	-	-	1	
-	•	•	-	1	-	•	-	•	-	-	-	-	1	
	•	-	-	•	-	•	-	•	-	-	-	-	•	
-	-	-	-	•	-	-	-	-	-	-	-	-	-	
			Note: only one sample for tensile and one sample for bend test							est				
#10	) Rar Ra	and Test	Throug	rh 180°	ic Satist	factory	Bend T	est						
#10	) Dai be	10 Bar Bend Test Through 180° is Satisfactory												

I/C Testing Laboratoires UET Lahore, Pakistan.

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- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

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## STRUCTURAL ENGINEERING DIVISION

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

To,
M/S Defence Housing Authority.
Lahore Cantt
(Proposed 2 Kanal, DRGCC Ph-III, DHA Ph-VI (M/s Construct)

Reference # CED/TFL **35975** (Dr. M Rizwan Riaz) Dated: 22-01-2021 Reference of the request letter # 408/241/E/Lab/18/869 Dated: 22-01-2021

**Tension Test Report** (Page -1/1)

Date of Test 22-01-2021 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze	Area (in²)		Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg) Nominal Actual		Actual	Nominal	Actual	(inch)	% E	Re
1	0.367	3	0.371	0.11	0.108	3740	5200	75000	76330	104200	106200	0.90	11.3	ш
2	0.369	3	0.371	0.11	0.108	3640	4960	73000	74050	99400	100900	1.10	13.8	Kamran Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	K
	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test	1		
#2	Bend Test #3 Bar Bend Test Through 180° is Satisfactory													
#3	Bar Ben	d Test	Through	180° is	s Satisfa	ctory								

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
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