



**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  
SMEC International Pty Ltd  
Peshawar-Karachi Motorway (PKM) Consultants Sukkur – Multan Section (392 km) (Section-6)

Reference # CED/TFL **33169** (Dr. Ali Ahmed)  
Reference of the request letter # 5065057/6/6/446

Dated: 02-05-2019  
Dated: 28-04-2019

**Tension Test Report** (Page – 1/2)

Date of Test 08-05-2019  
Gauge length 2 inches  
Description Aluminium Window Strip Tensile Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(mm)	(mm)	(mm <sup>2</sup> )	(kN)	(kN)	(MPa)	(MPa)	(in)		
1	Aluminium Window	23.30x1.45	33.79	7.35	8.17	217.55	241.82	0.10	5.00	
2		23.30x1.45	33.79	7.45	8.05	220.51	238.27	0.10	5.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
<b>Only Two Samples for Tensile Test</b>										
<b>Bend Test</b>										

**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

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To,  
Resident Engineer  
SMEC International Pty Ltd  
Peshawar-Karachi Motorway (PKM) Consultants Sukkur – Multan Section (392 km) (Section-6)

Reference # CED/TFL **33169** (Dr. M Rizwan Riaz)  
Reference of the request letter # 5065057/6/6/450

Dated: 02-05-2019  
Dated: 28-04-2019

**Tension Test Report** (Page – 2/2)

Date of Test 06-05-2019  
Gauge length -----  
Description Chain Link Fence Wire Tensile Test

Sr. No.	Diameter Wire	Breaking Load	Remarks
	(mm)	(kN)	
1	3.45	7.00	
2	3.45	7.00	
3	3.45	7.70	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
<b>Only Three Samples for Test</b>			

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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To,  
Project Director  
China Civil Engineering Construction Corporation  
Pakistan Branch Office

Reference # CED/TFL **33183** (Dr. Ali Ahmed)

Dated: 06-05-2019

Reference of the request letter # CCEC/PAK/DASUFIELD/RAR-01/19-038 Dated: 03-05-2019

**Tension Test Report** (Page – 1/4)

Date of Test 08-05-2019

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)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	GPa		
1	12.70 (1/2")	775.0	791.0	17500	171.68	19000	186.39	199	>3.50	xx
2	12.70 (1/2")	775.0	791.0	17600	172.66	18900	185.41	199	>3.50	xx
3	12.70 (1/2")	775.0	783.0	17100	167.75	20000	196.20	198	>3.50	xx
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	

**Only three 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

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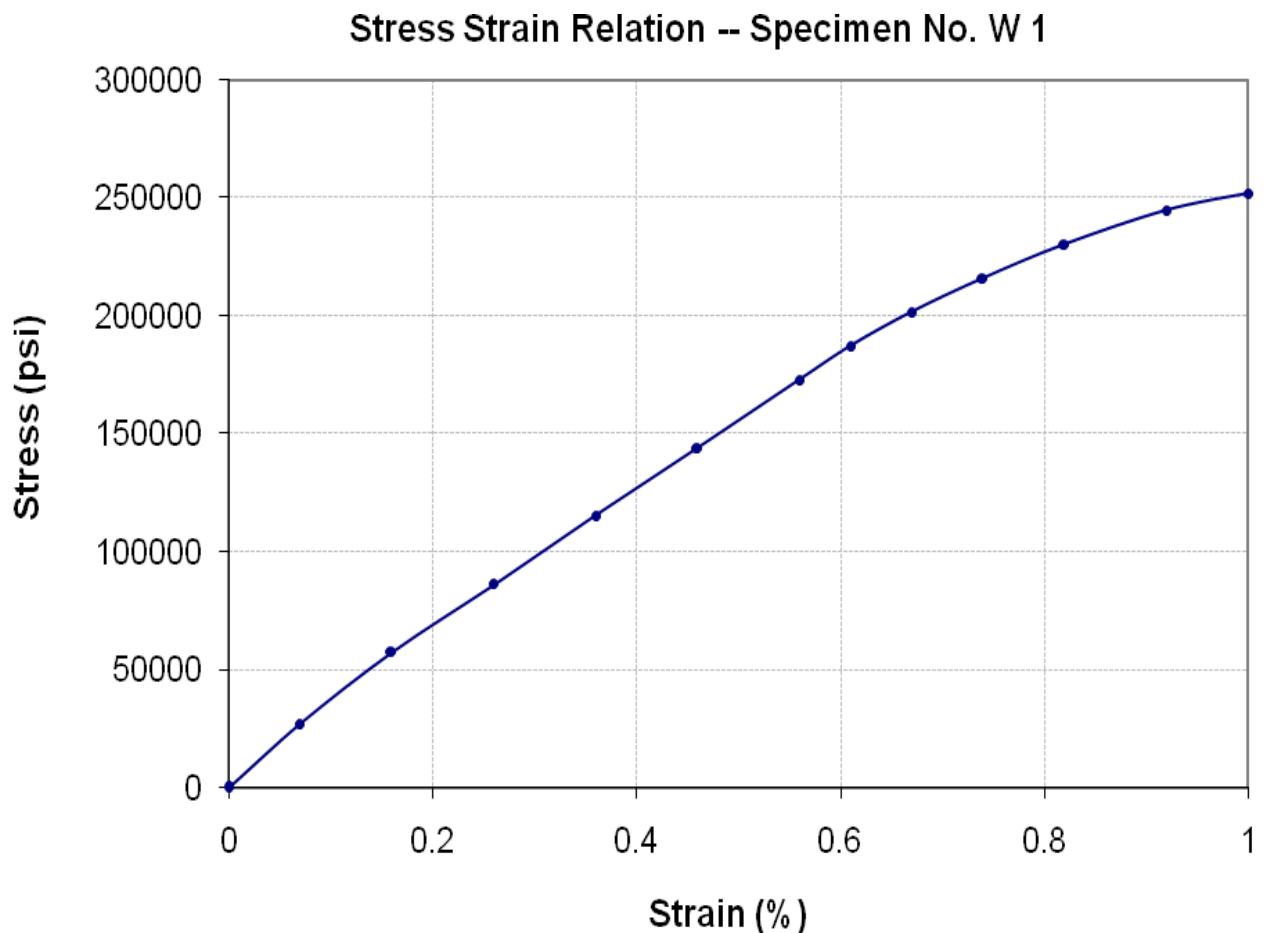
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Dated: 06-05-2019

Reference of the request letter # CCEC/PAK/DASUFIELD/RAR-01/19-038 Dated: 03-05-2019

**Graph** (Page – 2/4)



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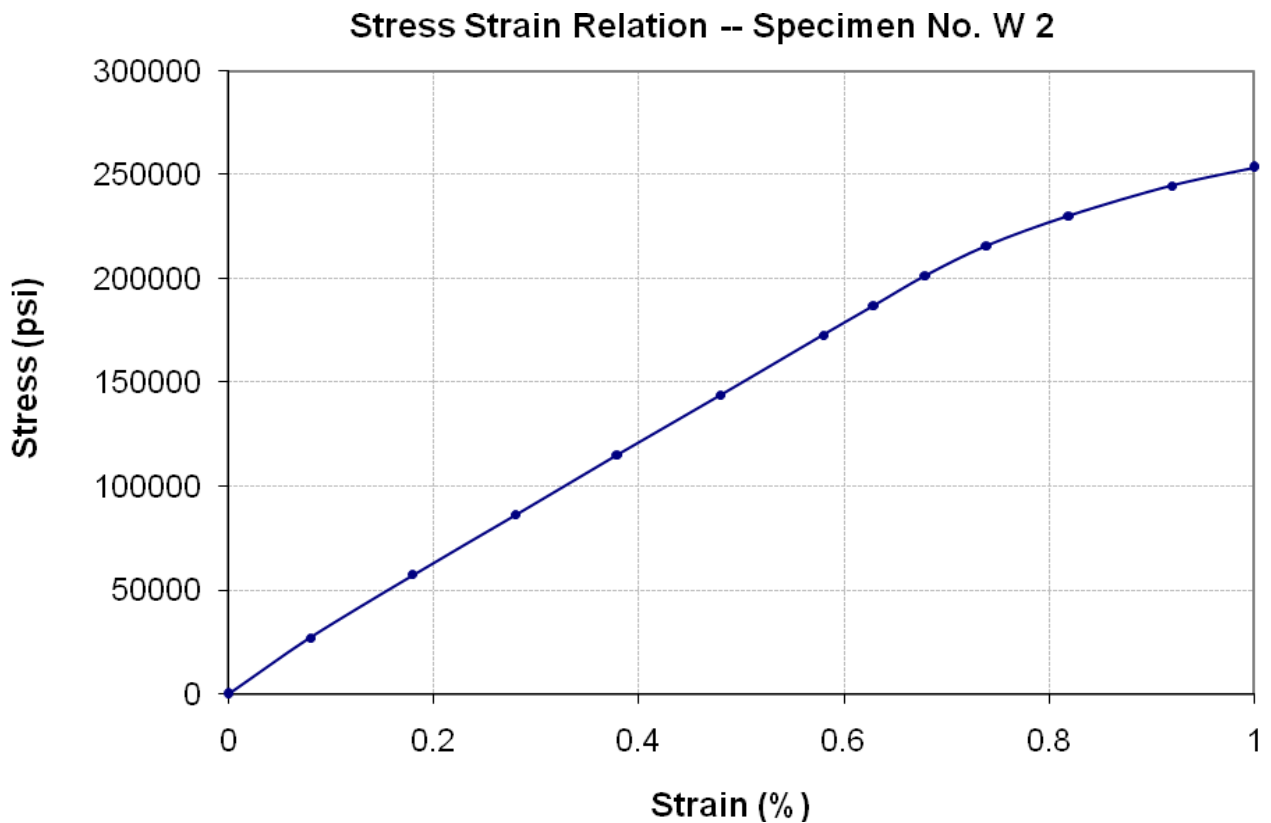
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Reference # CED/TFL **33183** (Dr. Ali Ahmed)

Dated: 06-05-2019

Reference of the request letter # CCEC/PAK/DASUFIELD/RAR-01/19-038 Dated: 03-05-2019

**Graph** (Page – 3/4)



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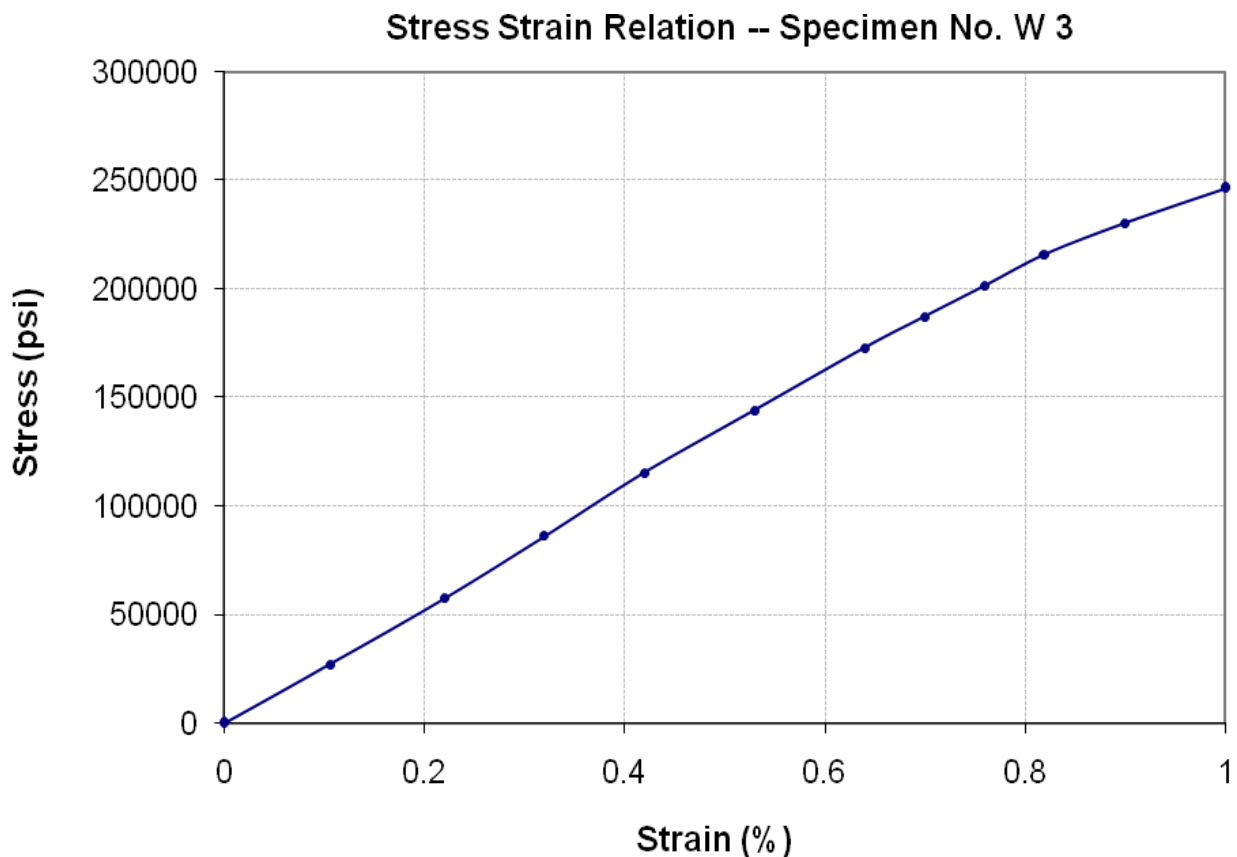
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Reference # CED/TFL **33183** (Dr. Ali Ahmed)

Dated: 06-05-2019

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**Graph** (Page – 4/4)



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**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
 Resident Engineer  
 ABM Engineers  
 Nizampur Kohat Road  
 (WMI)

Reference # CED/TFL **33186** (Dr. Ali Ahmed)  
 Reference of the request letter # AMB/RE/NKR/453

Dated: 06-05-2019  
 Dated: 03-05-2019

**Tension Test Report** (Page – 1/4)

Date of Test 08-05-2019  
 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)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)			
1	12.70 (1/2")	775.0	777.0	18000	176.58	19700	193.26	199	>3.50	xx
2	12.70 (1/2")	775.0	786.0	18100	177.56	20000	196.20	199	>3.50	xx
3	12.70 (1/2")	775.0	784.0	18000	176.58	20300	199.14	198	>3.50	xx
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
<b>Only three samples for Test</b>										

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 Laboratories**  
**UET Lahore, Pakistan.**

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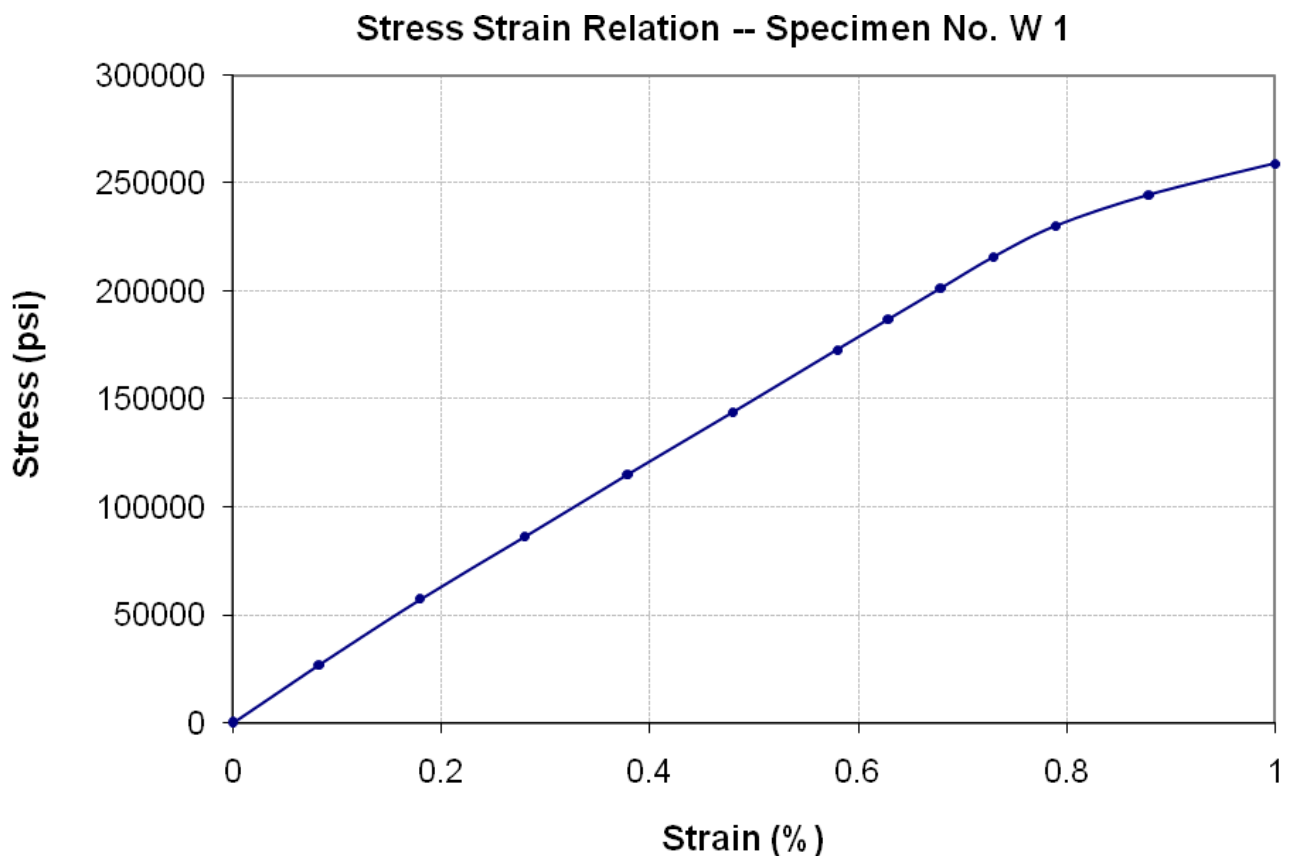
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**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
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To,  
Resident Engineer  
ABM Engineers  
Nizampur Kohat Road

Reference # CED/TFL **33186** (Dr. Ali Ahmed)  
Reference of the request letter # AMB/RE/NKR/453

Dated: 06-05-2019  
Dated: 03-05-2019

**Graph** (Page – 2/4)



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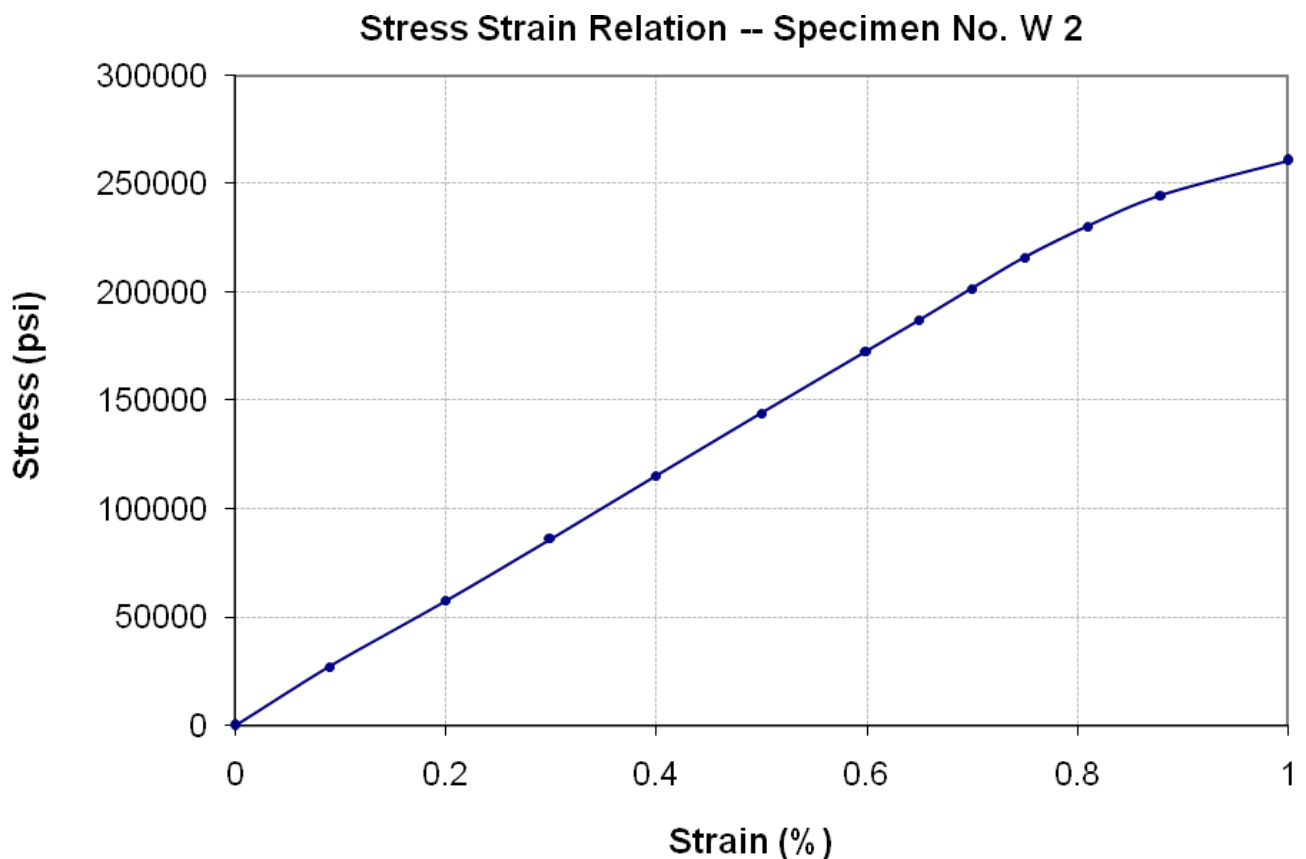
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To,  
Resident Engineer  
ABM Engineers  
Nizampur Kohat Road

Reference # CED/TFL **33186** (Dr. Ali Ahmed)  
Reference of the request letter # AMB/RE/NKR/453

Dated: 06-05-2019  
Dated: 03-05-2019

**Graph** (Page – 3/4)



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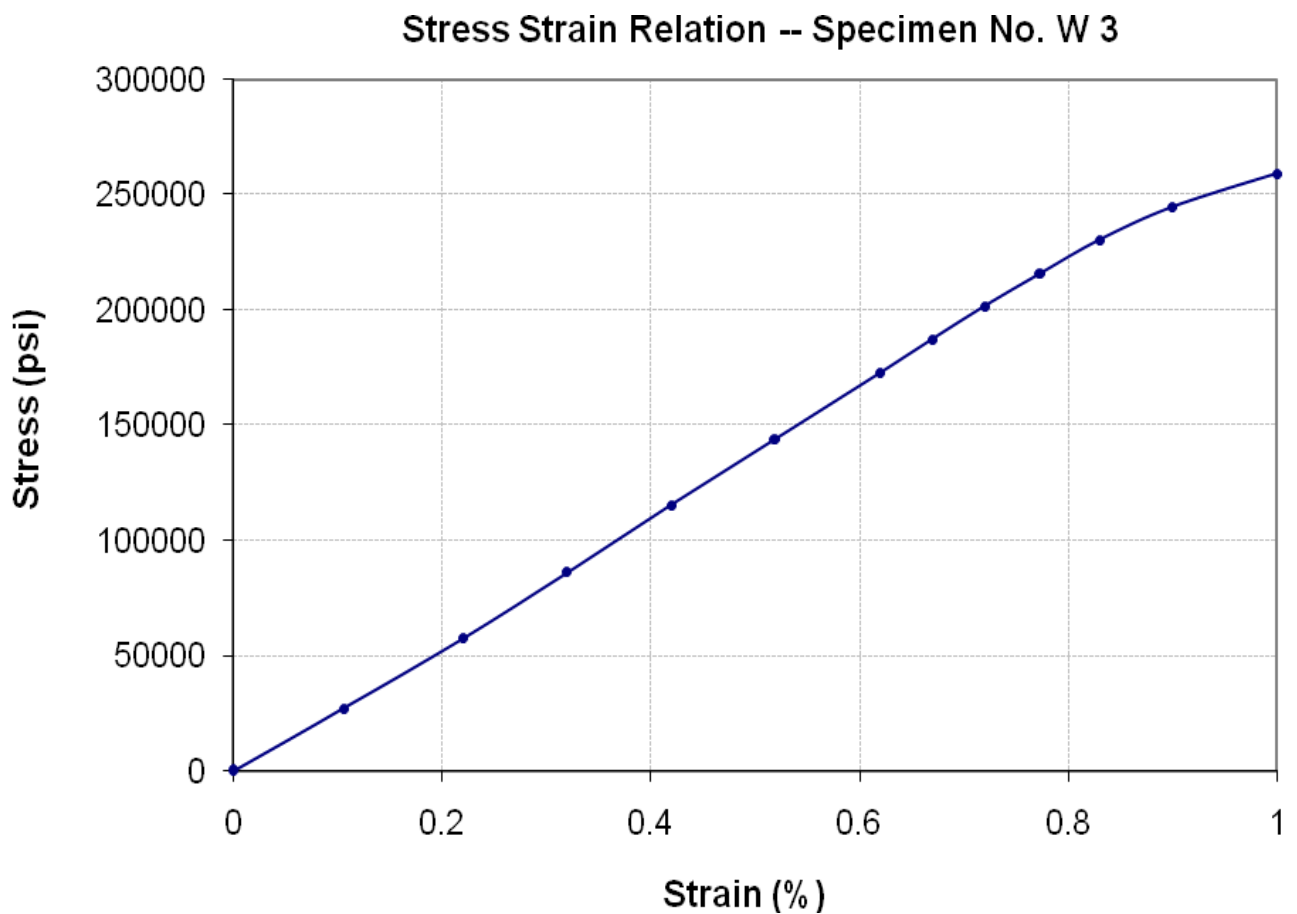
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To,  
Resident Engineer  
ABM Engineers  
Nizampur Kohat Road

Reference # CED/TFL **33186** (Dr. Ali Ahmed)  
Reference of the request letter # AMB/RE/NKR/453

Dated: 06-05-2019  
Dated: 03-05-2019

**Graph** (Page – 4/4)



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**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
Resident Engineer  
Al-Imam Enterprises Pvt. Ltd  
Construction of Gold Crest Mall and Residency Phase 4, DHA Lahore

Reference # CED/TFL **33190** (Dr. Ali Ahmed)  
Reference of the request letter # Al-Imam/01/GIGA/DHA/LHE/774

Dated: 06-05-2019  
Dated: 03-05-2019

**Weight & Size Test Report** (Page – 1/1)

Date of Test 09-05-2019  
Gauge length -----  
Description MS Plate Weight and Size Test

Sr. No.	Designation	Weight	Length	Width (b)	Weight per Unit Area	Thickness (t)	Remark
1	MS Plate	2333	32.80	15.30	46.49	6.0	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
<b>Only Two Samples for Test</b>							

**I/C Testing Laboratories**  
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Ref: CED/TFL/05/33193

Dated: 07-05-19

To  
DCRE/RE-1  
Zeeruk International (Pvt) Ltd  
Lahore Sialkot Motorway Project

Subject: - TEST RESULT REPORT FOR BEARING DEVICE (PAD)

Reference to your letter no. LSMP/RE-1/2019/767, Dated: 02/05/2019 on the above mentioned subject. One Elastomeric Bearing Rubber Pad (EBRP) (Source: Rainbow) has been received by us. The same was tested and results are given below.

Laboratory : TEST FLOOR LAB  
Machine : SHIMADZU  
Sample No. : 1/1  
Dimensions of EBRP : 503 x 503 x 76.84 mm

**TEST RESULTS - SHORT DURATION**

Load Duration : 5+5 minutes  
Test Load : 198 TONS  
Bulging Pattern : Slight Bulging.  
Laminated Parallelism : Parallel  
Cracks : No crack was observed

(Witness by Tanvir A. Khan (LME - Zeerk), Salahuddin (ME - Osmani) & Ghazanfar Ali (M.E LSM - FWO))

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To,  
 Project Coordinator  
 SUM INCOPORATED  
 MCB Main Boulevard Extension Civil & Finishes Works Gulburge, Lahore

Reference # CED/TFL **33194** (Dr. Ali Ahmed)  
 Reference of the request letter # Nil

Dated: 07-05-2019  
 Dated: 07-05-2019

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

Date of Test 08-05-2019  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.364	3	0.369	0.11	0.107	3600	4800	72200	74220	96200	99000	0.90	11.3	
2	0.365	3	0.370	0.11	0.107	3500	4500	70200	71830	90200	92400	0.90	11.3	
3	0.370	3	0.372	0.11	0.109	3700	4700	74200	75040	94200	95400	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile test</b>														
Bend Test														

**I/C Testing Laboratoires**  
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