



**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  
AAA Jv ACC  
TurakPak  
Improvement/ Widening of Thokar Niaz Baig – Hudiyara Drain Section of N-5

Reference # CED/TFL **36436** (Dr. Qasim Khan)  
Reference of the request letter # THDP/RE/01/708

Dated: 06-05-2021  
Dated: 02-04-2021

**Weight & Size Test Report** (Page – 1/4)

Date of Test 02-07-2021  
Description MS I Beam & MS Channel Weight and Size Test

Sr. No.	Designation		Weight	Length	Weight per Unit Length	Depth (d)	Flange Width (b <sub>f</sub> )	Flange Thickness (t <sub>f</sub> )	Web Thickness (t <sub>w</sub> )	Remark
	(mm)									
1	MS I Beam	600x200x11x17	17750	17.00	104.41	600.00	200.00	19.40	13.20	
2	MS Channel	100x50x6	6450	62.00	10.40	100.00	50.00	10.10	6.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	
<b>Only Two Samples for Test</b>										

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

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Reference # CED/TFL **36436** (Dr. Qasim Khan)  
Reference of the request letter # THDP/RE/01/708

Dated: 06-05-2021  
Dated: 02-04-2021

**Weight & Size Test Report** (Page – 2/4)

Date of Test 02-07-2021  
Description Steel Plate Weight and Size Test

Sr. No.	Designation		Weight	Length	Width (b)	Weight per Unit Area	Thickness	Remark
	(mm)							
1	MS Plate	40	29800	60.70	15.50	316.73	40.10	
2	MS Plate	16	11860	60.9	15.3	127.28	15.80	
3	Chequered Plate	5	3780	61.20	15.50	39.85	5.00	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
<b>Only Three Samples for Test</b>								

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Improvement/ Widening of Thokar Niaz Baig – Hudiyara Drain Section of N-5

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Reference of the request letter # THDP/RE/01/708

Dated: 06-05-2021  
Dated: 02-04-2021

**Weight & Size Test Report** (Page – 3/4)

Date of Test 02-07-2021  
Description MS Angle Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	L-1	L-2	Thickness	Remark
	(mm)	(g)	(cm)	(kg/m)	(mm)	(mm)	(mm)	
1	100x100x8	8750	63.50	13.78	100.10	100.20	9.40	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
<b>Only One Sample for Test</b>								

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Reference of the request letter # THDP/RE/01/708

Dated: 06-05-2021  
Dated: 02-04-2021

**Weight & Size Test Report** (Page – 4/4)

Date of Test 02-07-2021  
Description MS Tube Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	Outer Dimension		Thickness	Remark
					X	Y		
	(mm)	(g)	(cm)	(kg/m)	(mm)	(mm)	(mm)	
1	50x50x4	3800	63.50	5.98	50.50	51.00	5.00	
2	20x20 16Gauge	560	61.20	0.92	21.30	20.10	1.20	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
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<b>Only Two Samples for Test</b>								

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To,  
Director  
ConDrill (Pvt) Ltd  
Shifa Medical Center Islamabad – Plot No. 05, F-11, Islamabad, (Construction of Excavation Protection System)

Reference # CED/TFL **36668** (Dr. Safer Abbass)  
Reference of the request letter # CD/34-B/03/8668

Dated: 30-06-2021  
Dated: 29-06-2021

**Tension Test Report** (Page – 1/2)

Date of Test 02-07-2021  
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)		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	792.0	17600	172.66	19000	186.39	198	>3.50	xx
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
<b>Only one sample 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 Laboratoires**  
**UET Lahore, Pakistan.**

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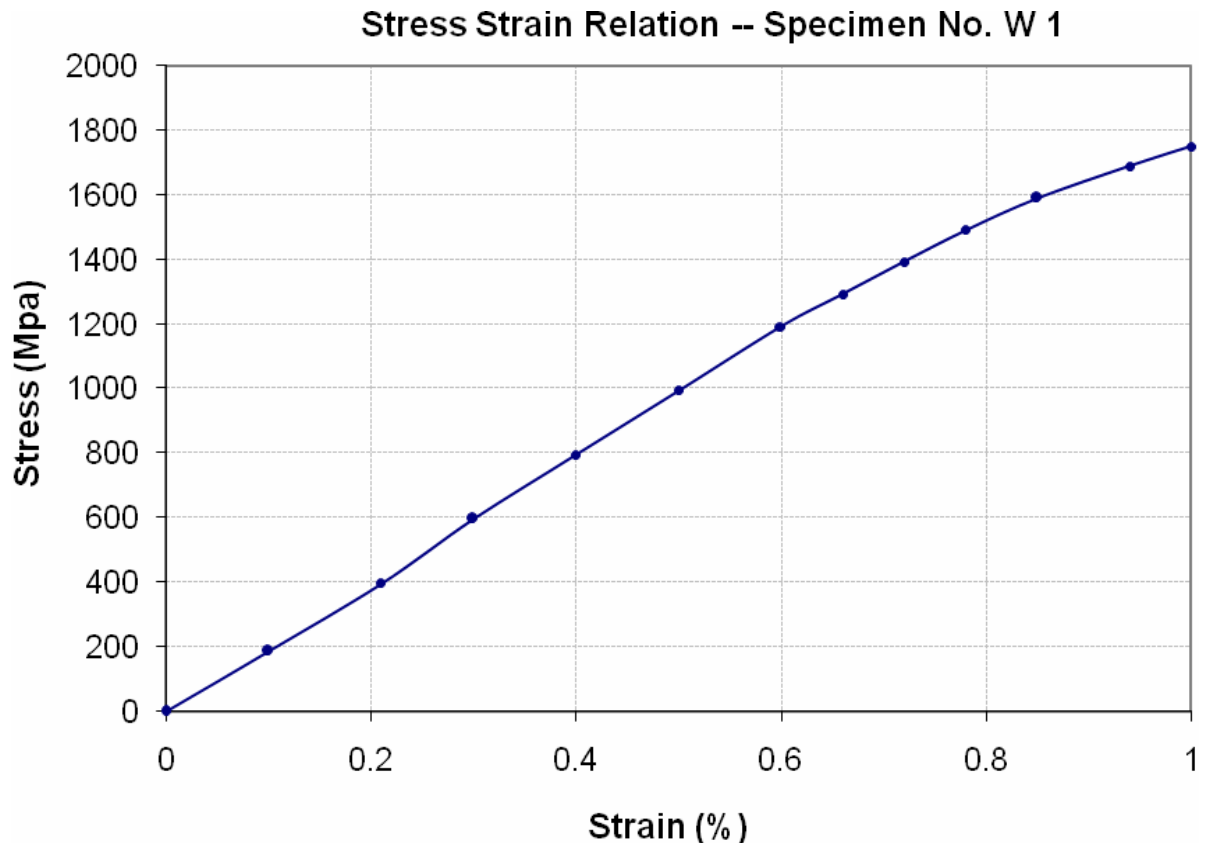
**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
Director  
ConDrill (Pvt) Ltd  
Shifa Medical Center Islamabad – Plot No. 05, F-11, Islamabad, (Construction of Excavation Protection System)

Reference # CED/TFL **36668** (Dr. Safer Abbass)  
Reference of the request letter # CD/34-B/03/8668

Dated: 30-06-2021  
Dated: 29-06-2021

**Graph** (Page – 2/2)



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

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**University of Engineering and Technology Lahore, 54890**  
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To,  
Resident Engineer  
AZ Engineering Associates  
Dualization of Road from GT Road (Samma) to Gujrat Diga Road I/C Gujrat Flyover Length = 31 kms in  
District Gujrat (Group-IV-B Construction of Bridge over Bhimber Nullah along with Approaches)

Reference # CED/TFL **36671** (Dr. Safer Abbass)  
Reference of the request letter # RE AZEA/GT-149

Dated: 30-06-2021  
Dated: 22-06-2021

**Tension Test Report** (Page – 1/4)

Date of Test 02-07-2021  
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)		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	780.0	17600	172.66	19900	195.22	199	>3.50	xx
2	12.70 (1/2")	775.0	778.0	17500	171.68	19800	194.24	198	>3.50	xx
3	12.70 (1/2")	775.0	777.0	18400	180.50	19900	195.22	199	>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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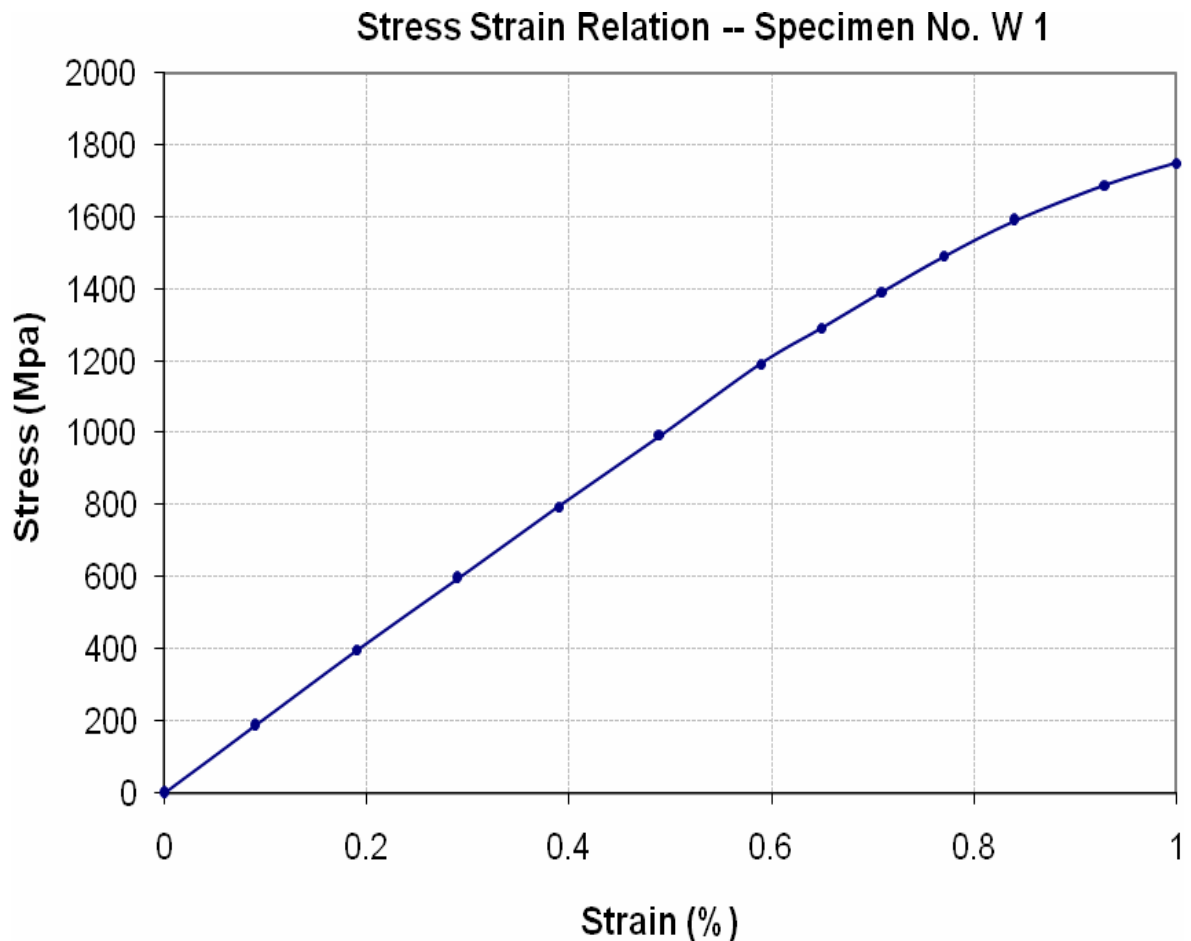
To,  
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AZ Engineering Associates  
Dualization of Road from GT Road (Samma) to Gujrat Diga Road I/C Gujrat Flyover Length = 31 kms in  
District Gujrat (Group-IV-B Construction of Bridge over Bhimber Nullah along with Approaches)

Reference # CED/TFL **36671** (Dr. Safer Abbass)  
Reference of the request letter # RE AZEA/GT-149

Dated: 30-06-2021

Dated: 22-06-2021

**Graph** (Page – 2/4)



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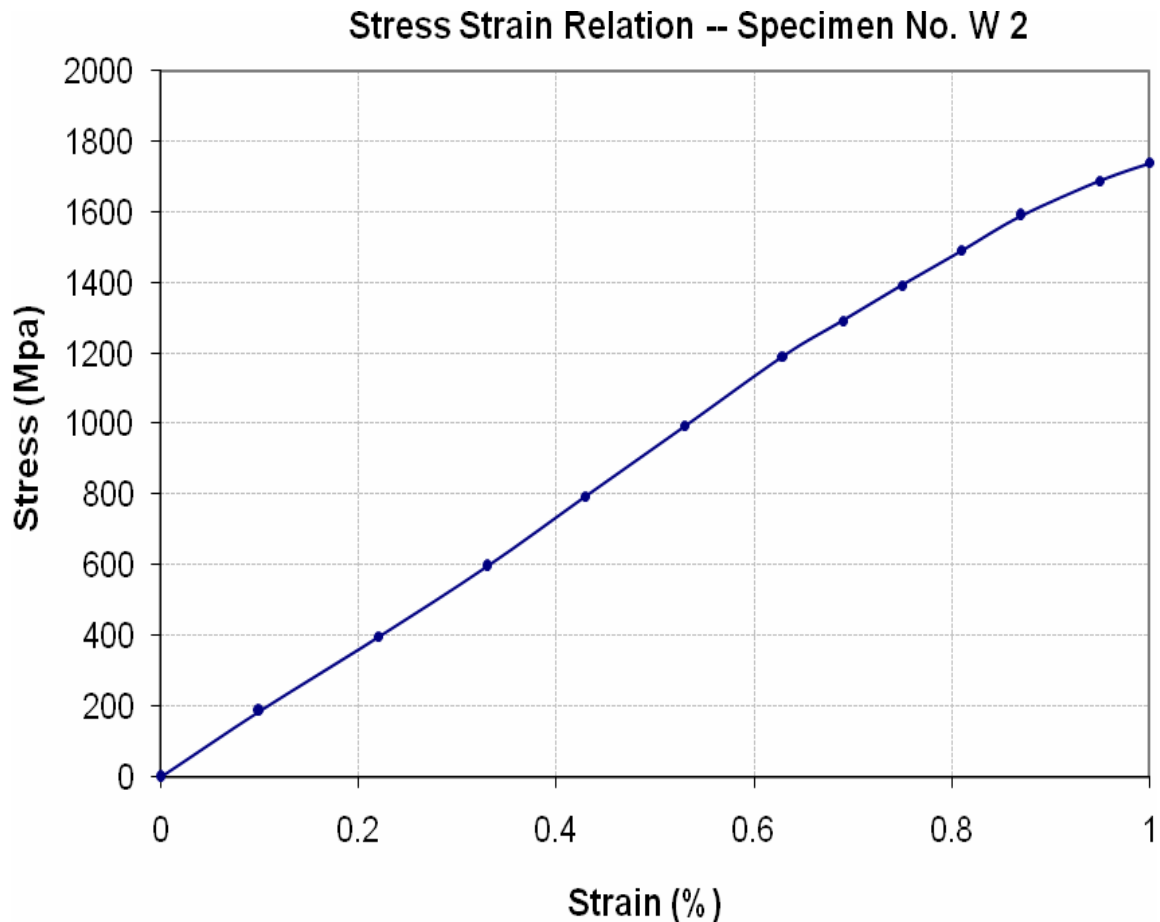
To,  
Resident Engineer  
AZ Engineering Associates  
Dualization of Road from GT Road (Samma) to Gujrat Diga Road I/C Gujrat Flyover Length = 31 kms in  
District Gujrat (Group-IV-B Construction of Bridge over Bhimber Nullah along with Approaches)

Reference # CED/TFL **36671** (Dr. Safer Abbass)  
Reference of the request letter # RE AZEA/GT-149

Dated: 30-06-2021

Dated: 22-06-2021

**Graph** (Page – 3/4)



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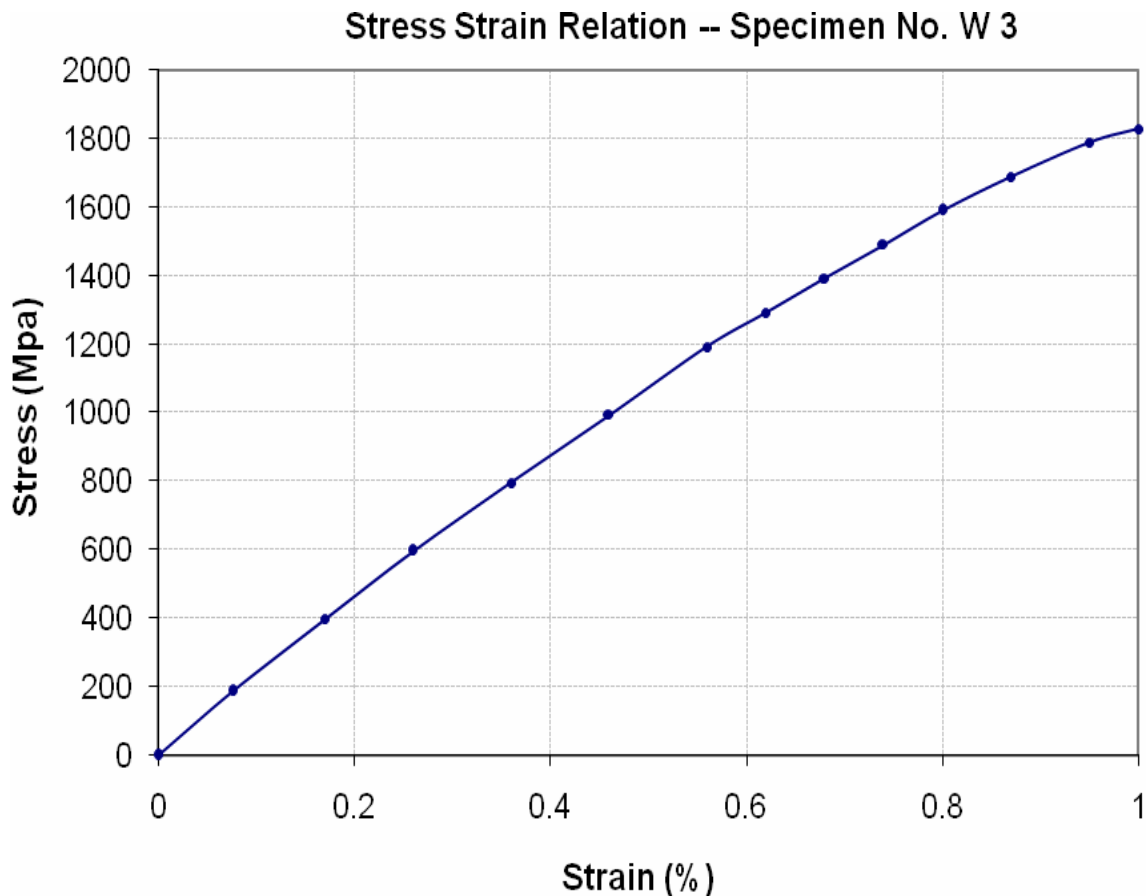
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District Gujrat (Group-IV-B Construction of Bridge over Bhimber Nullah along with Approaches)

Reference # CED/TFL **36671** (Dr. Safer Abbass)  
Reference of the request letter # RE AZEA/GT-149

Dated: 30-06-2021

Dated: 22-06-2021

**Graph** (Page – 4/4)



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Ref: CED/TFL/06/36676

Dated: 01-07-2021

Dated of Test: 02-07-2021

**To**  
**Resident Engineer**  
**NESPAK**  
**Construction of Underpass at Ghulab Devi Hospital and Additional Lane on Lahore Bridge**

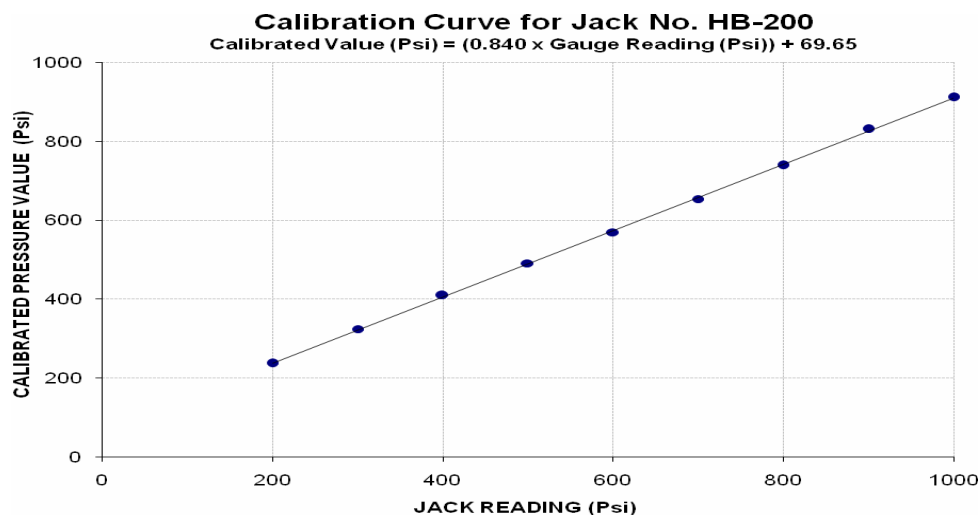
**Subject: - CALIBRATION OF HYDRAULIC JACK WITH PRESSURE GAUGE**  
**(MARK: TFL/06/36676) (Page # 1/1)**

Reference to your Letter No. GD/RE/05/01, dated: 30/06/2021 on the subject cited above. One Hydraulic No. HB-200 with Pressure Gauge No. EN837-1 as received by us has been calibrated. The results are tabulated as under:

**Total Range : Zero - 6000 (Psi)**  
**Calibrated Range : Zero - 1000 (Psi)**

Hydraulic Jack Reading (Psi)	200	300	400	500	600	700	800	900	1000
Calibrated Load (kg)	48600	66400	84000	100600	116800	134200	151600	170400	187000
Calibrated Pressure (Psi)	237	324	409	490	569	654	739	830	911

The Ram Area of Jack = 452.39 in<sup>2</sup> (Witness by Ali Aqdas (Geotechnical Engr. NESPAK))



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To,  
M/S ZHN Contracting Corporation (SMC-Private) Limited  
Lahore

Reference # CED/TFL **36683** (Dr. Mazhar Saleem)  
Reference of the request letter # ZHN/033/2021

Dated: 02-07-2021

Dated: 04-05-2021

**Tension Test Report** (Page – 1/1)

Date of Test 02-07-2021  
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	438	10000	98.10	10500	103.01	>3.50	
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
<b>Only one sample for Test</b>									

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