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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-I NESPAK Widening of Aik Moria Pull, Lahore

Reference # CED/TFL **34111, 199** (Dr. Waseem Abbas) Dated: 31-10-2019 Reference of the request letter # 3772/AMP/103/MWA/04/44 Dated: 10-10-2019

Tension Test Report (Page – 1/8)

Date of Test 13-11-2019 Gauge length 2 inches

Description Steel Structure Steel Strip Tensile Test as per ASTM A-36

Sr. No.		Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks	
			(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(in)	3		
1	Angle	127x127x12mm	26.10x12.50	326.25	11300	17300	339.78	520.19	0.70	35.00		
2	Aligie	127x127x12mm	26.10x12.50	326.25	11200	17000	336.77	511.17	0.75	37.50		
3	Anglo	152x152x20mm	25.70x19.60	503.72	17200	27300	334.97	531.67	0.80	40.00		
4	Angle	152x152x20mm	25.70x19.60	503.72	16900	26900	329.13	523.88	0.80	40.00		
5	Amala	101x101x10mm	26.10x9.80	255.78	8400	12900	322.17	494.76	0.80	40.00		
6	Angle	101x101x10mm	26.10x9.80	255.78	8300	12700	318.33	487.09	0.70	35.00		
7	Anglo	$2^{-1}/_2x2^{-1}/_2x1/4$	26.20x6.10	159.82	5700	8400	349.87	515.61	0.70	35.00		
8	Angle	2-1/2x2-1/2x1/4	26.10x6.10	159.21	6100	8900	375.86	548.39	0.80	40.00		
9	I-Beam	18"x7"	26.10x13.40	349.74	11900	19400	333.79	544.16	0.75	37.50		
10	(Cross Girder)	18"x7"	28.70x13.40	384.58	12000	20600	306.10	525.47	0.70	35.00		
	I		Only	Ten Sam	ples for '	Tensile Te	st					
Bend 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
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To, Resident Engineer-I NESPAK Widening of Aik Moria Pull, Lahore

Reference # CED/TFL **34111, 199** (Dr. Waseem Abbas) Dated: 31-10-2019 Reference of the request letter # 3772/AMP/103/MWA/04/44 Dated: 10-10-2019

Tension Test Report (Page – 2/8)

Date of Test 13-11-2019 Gauge length 2 inches

Description Steel Structure Steel Strip Tensile Test as per ASTM A-36

Sr. No.		Designation	(mm) Size of Strip	X Section Area	(kg)	Breaking Load	(MPa)	Ultimate Stress	(ui) Elongation	% Elongation	Remarks		
1	I Daam	12!!(!!	26.10x8.40	219.24	7900	12200	353.49	545.89	0.65	32.50			
1	I-Beam (Rail	12"x6"								-			
2	Girder)	12''x6''	26.40x8.40	221.76	7800	12400	345.05	548.54	0.60	30.00			
3	Channel	6"x3"	26.90x7.90	212.51	7700	11900	355.45	549.33	0.60	30.00			
4	Chamiei	6"x3"	27.90x7.90	220.41	7800	12000	347.16	534.10	0.60	30.00			
5	Amala	76x76x10mm	26.20x9.75	255.45	8300	12700	318.74	487.72	0.60	30.00			
6	Angle	76x76x10mm	26.20x9.75	255.45	8500	13100	326.42	503.08	0.70	35.00			
7	C4i.	150x38x16mm	18.10x15.60	282.36	8700	13900	302.26	482.93	0.70	35.00			
8	Strip	150x38x16mm	18.10x15.60	282.36	8700	13800	302.26	479.45	0.70	35.00			
9	DI 4	152x250x12mm	18.60x11.80	219.48	7900	12100	353.10	540.83	0.70	35.00			
10	Plate	152x250x12mm	18.60x11.80	219.48	7800	11900	348.63	531.89	0.70	35.00			
			Only	Ten Samp	les for T	ensile Tes	t						
	Bend Test												

I/C Testing Laboratoires UET Lahore, Pakistan.

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To, Resident Engineer-I NESPAK Widening of Aik Moria Pull, Lahore

Reference # CED/TFL **34111, 199** (Dr. Waseem Abbas) Dated: 31-10-2019 Reference of the request letter # 3772/AMP/103/MWA/04/44 Dated: 10-10-2019

Weight &Size Test Report (Page – 3/8)

Date of Test 13-11-2019

Gauge length -----

Description Angle Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	L-1	L-2	Thickness	Remark
		(g)	(cm)	(kg/m)	(mm)	(mm)	(mm)	
1	127x127x12mm	11480	45.70	25.12	127.80	127.20	12.40	
2	152x152x20mm	20000	46.10	43.38	155.20	156.10	19.60	
3	101x101x10mm	6990	45.90	15.23	102.00	103.10	9.85	
4	76x76x10mm	4980	43.90	11.34	76.00	76.80	9.75	
5	2- ¹ / ₂ x2- ¹ / ₂ x1/4	3400	45.90	7.41	63.60	64.20	6.20	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
		(Only Five S	Samples fo	or Test		ı	

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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-I NESPAK Widening of Aik Moria Pull, Lahore

Reference # CED/TFL **34111, 199** (Dr. Waseem Abbas) Dated: 31-10-2019 Reference of the request letter # 3772/AMP/103/MWA/04/44 Dated: 10-10-2019

Weight &Size Test Report (Page – 4/8)

Date of Test 14-06-2019

Gauge length ----

Description I-Beam & Channel Weight and Size Test

Sr. No.	Designation		Weight	Length	Weight per Unit Length	Depth (d)	Flange Width (b _f)	Flange Thickness (t _f)	Web Thickness (t _w)	Remark
	(inch)		(g)	(cm)	(kg/m)	mm	mm	mm	mm	
1	I-Beam (Cross Girder)	18x7	54800	45.70	119.91	460.00	180.00	26.00	13.40	
2	I-Beam (Rail Girder)	12x6	25900	45.90	56.43	307.00	151.60	13.70	8.60	
3	Channel	6x3	9098	45.90	19.82	153.00	78.80	10.00	9.80	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
			Onl	y Three	Samples f	or Test				

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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-I NESPAK Widening of Aik Moria Pull, Lahore

Reference # CED/TFL **34111, 199** (Dr. Waseem Abbas) Dated: 31-10-2019 Reference of the request letter # 3772/AMP/103/MWA/04/44 Dated: 10-10-2019

Weight &Size Test Report (Page – 5/8)

Date of Test 13-11-2019

Gauge length -----

Description Plate Weight and Size Test

Sr. No.	Decimotion	Designation	Weight	Length	Width	Weight per Unit Area	Thickness	Remark
			(g)	(cm)	(mm)	(kg/m ²)	(mm)	
1	Strip	150x38x16mm	4660	46.30	80.20	125.50	15.60	
2	Plate	152x250x12	3498	45.80	77.00	99.19	11.80	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-		
		(Only Two S	amples fo	r Test			

I/C Testing Laboratoires UET Lahore, Pakistan.

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To, Resident Engineer-I NESPAK Widening of Aik Moria Pull, Lahore

Reference # CED/TFL **34111, 199** (Dr. Waseem Abbas) Dated: 31-10-2019 Reference of the request letter # 3772/AMP/103/MWA/04/50 Dated: 26-10-2019

Tension Test Report (Page – 6/8)

Date of Test 13-11-2019 Gauge length 2 inches

Description Steel Structure Steel Strip Tensile Test as per ASTM A-36

	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	Elongation	Remarks	
(n	nm)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(in)	%		
A 1 .	89x89x10	19.40x9.75	189.15	6500	10100	337.11	523.82	0.70	35.00		
Angle	89x89x10	19.15x9.75	186.71	6400	9600	336.26	504.39	0.70	35.00		
D - J DI - 4 -	1120x64x25	19.95x25.35	505.73	20500	26100	397.65	506.28	1.00	50.00		
Bed Plate	1120x64x25	19.95x25.35	505.73	20600	26600	399.59	515.98	1.00	50.00		
Packing	76x458x20	19.40x19.60	380.24	10500	16600	270.89	428.27	0.90	45.00		
Plate	76x458x20	18.60x19.60	364.56	9500	16400	255.64	441.31	0.80	40.00		
Protection	458x76x3	19.10x3.00	57.30	1880	2840	321.86	486.22	0.70	35.00		
Plate	458x76x3	19.10x3.00	57.30	1920	2880	328.71	493.07	0.70	35.00		
W.l. Di.	458x75x10	19.30x9.80	189.14	6500	8720	337.13	452.27	0.90	45.00		
web Plate	458x75x10	18.30x9.80	179.34	5500	7600	300.85	415.72	0.90	45.00		
Only Ten Samples for Tensile Test										-	
Bend Test											
	Angle Bed Plate Packing Plate Protection	(mm) Angle 89x89x10 89x89x10 1120x64x25 1120x64x25 1120x64x25 Packing Plate 76x458x20 Protection Plate 458x76x3 Web Plate 458x75x10	(mm)(mm)Angle89x89x1019.40x9.7589x89x1019.15x9.75Bed Plate1120x64x2519.95x25.35Packing Plate76x458x2019.40x19.60Protection Plate458x76x319.10x3.00Web Plate458x75x1019.30x9.80458x75x1018.30x9.80	(mm) (mm) (mm²) Angle 89x89x10 19.40x9.75 189.15 89x89x10 19.15x9.75 186.71 Bed Plate 1120x64x25 19.95x25.35 505.73 Packing Plate 76x458x20 19.40x19.60 380.24 76x458x20 18.60x19.60 364.56 Protection Plate 458x76x3 19.10x3.00 57.30 Web Plate 458x75x10 19.30x9.80 189.14 458x75x10 18.30x9.80 179.34 Only Ten Sam	(mm) (mm) (mm²) (kg) Angle 89x89x10 19.40x9.75 189.15 6500 89x89x10 19.15x9.75 186.71 6400 Bed Plate 1120x64x25 19.95x25.35 505.73 20500 Packing Plate 76x458x20 19.40x19.60 380.24 10500 Protection Plate 458x76x3 19.10x3.00 57.30 1880 Plate 458x76x3 19.10x3.00 57.30 1920 Web Plate 458x75x10 19.30x9.80 189.14 6500 Only Ten Samples for Years Only Ten Samples for Years	(mm) (mm) (mm²) (kg) (kg) Angle 89x89x10 19.40x9.75 189.15 6500 10100 89x89x10 19.15x9.75 186.71 6400 9600 Bed Plate 1120x64x25 19.95x25.35 505.73 20500 26100 Packing Plate 76x458x20 19.40x19.60 380.24 10500 16600 Protection Plate 458x76x3 19.10x3.00 57.30 1880 2840 Web Plate 458x76x3 19.10x3.00 57.30 1920 2880 Web Plate 458x75x10 19.30x9.80 189.14 6500 8720 Only Ten Samples for Tensile Ten	(mm) (mm) (mm²) (kg) (kg) (MPa) Angle 89x89x10 19.40x9.75 189.15 6500 10100 337.11 89x89x10 19.15x9.75 186.71 6400 9600 336.26 Bed Plate 1120x64x25 19.95x25.35 505.73 20500 26100 397.65 Packing Plate 76x458x20 19.40x19.60 380.24 10500 16600 270.89 Protection Plate 458x76x3 19.10x3.00 57.30 1880 2840 321.86 Web Plate 458x75x10 19.30x9.80 189.14 6500 8720 337.13 Only Ten Samples for Tensile Test	(mm) (mm²) (kg) (kg) (MPa) (MPa) Angle 89x89x10 19.40x9.75 189.15 6500 10100 337.11 523.82 89x89x10 19.15x9.75 186.71 6400 9600 336.26 504.39 Bed Plate 1120x64x25 19.95x25.35 505.73 20500 26100 397.65 506.28 Packing Plate 76x458x20 19.40x19.60 380.24 10500 16600 270.89 428.27 Protection Plate 458x76x3 19.10x3.00 57.30 1880 2840 321.86 486.22 Web Plate 458x75x10 19.30x9.80 189.14 6500 8720 337.13 452.27 458x75x10 18.30x9.80 179.34 5500 7600 300.85 415.72 Only Ten Samples for Tensile Test	(mm) (mm) (mm²) (kg) (kg) (MPa) (MPa) (in) Angle 89x89x10 19.40x9.75 189.15 6500 10100 337.11 523.82 0.70 89x89x10 19.15x9.75 186.71 6400 9600 336.26 504.39 0.70 Bed Plate 1120x64x25 19.95x25.35 505.73 20500 26100 397.65 506.28 1.00 Packing Plate 76x458x20 19.40x19.60 380.24 10500 16600 270.89 428.27 0.90 Protection Plate 458x76x3 19.10x3.00 57.30 1880 2840 321.86 486.22 0.70 Web Plate 458x75x10 19.30x9.80 189.14 6500 8720 337.13 452.27 0.90 Only Ten Samples for Tensile Test	(mm) (mm) (mm²) (kg) (kg) (MPa) (MPa) (in) Angle 89x89x10 19.40x9.75 189.15 6500 10100 337.11 523.82 0.70 35.00 Bed Plate 1120x64x25 19.95x25.35 505.73 20500 26100 397.65 506.28 1.00 50.00 Packing Plate 76x458x20 19.40x19.60 380.24 10500 16600 270.89 428.27 0.90 45.00 Protection Plate 458x76x3 19.10x3.00 57.30 1880 2840 321.86 486.22 0.70 35.00 Web Plate 458x75x10 19.30x9.80 189.14 6500 8720 337.13 452.27 0.90 45.00 • Only Ten Samples for Tensile Test	

I/C Testing Laboratoires UET Lahore, Pakistan.

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To, Resident Engineer-I NESPAK Widening of Aik Moria Pull, Lahore

Reference # CED/TFL **34111, 199** (Dr. Waseem Abbas) Dated: 31-10-2019 Reference of the request letter # 3772/AMP/103/MWA/04/50 Dated: 26-10-2019

Weight &Size Test Report (Page – 7/8)

Date of Test 13-11-2019

Gauge length ----

Description 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	89x89x10	6600	45.80	14.41	90.10	91.20	9.65	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
			Only One	Sample fo	r Test			

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To, Resident Engineer-I NESPAK Widening of Aik Moria Pull, Lahore

Reference # CED/TFL **34111, 199** (Dr. Waseem Abbas) Dated: 31-10-2019 Reference of the request letter # 3772/AMP/103/MWA/04/50 Dated: 26-10-2019

Weight & Size Test Report (Page – 8/8)

Date of Test 13-11-2019

Gauge length ------

Description Plate Weight and Size Test

Sr. No.	Designation		Weight	Length	Width	Weight per Unit Area	Thickness	Remark
	(mn	1)	(g)	(cm)	(mm)	(kg/m ²)	(mm)	
1	Bed Plate	1120x64x25	7400	45.80	78.1	206.88	25.10	
2	Packing Plate	76x458x20	5600	46.00	78.2	155.68	19.55	
3	Protection Plate	458x76x3	820	46.00	76.2	23.39	2.90	
4	Web Plate	458x75x10	2780	45.90	77.3	78.35	9.80	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
		On	ly Three S	amples for	r Test			
							-	

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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 Defence Housing Authority.

Lahore Cantt

(Const and Allied Facilities at Emps Living Accn, W-Block, DHA Ph-VIII (M/s Wareesha

Enterprises)

Reference # CED/TFL **34167** (Dr. Waseem Abbass)

Reference of the request letter # 408/241/E/Lab/763/06

Dated: 12-11-2019

Dated: 11-11-2019

Tension Test Report (Page -1/1)

Date of Test 13-11-2019 Gauge length 8 inches

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

Sr. No.	Weight		Diameter/size		rea 1 ²)	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.379	3	0.376	0.11	0.111	3800	5700	76200	75240	114300	112900	1.00	12.5	
2	0.379	3	0.377	0.11	0.112	3900	5700	78200	77090	114300	112700	1.20	15.0	Saeed Kasur
-	-	-	-	-	-	-	-	-	-	-	-	-	-	97 H
•	•	•	-	1	-	•	-	-	-	-	-	-	-	
-		-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	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	actory								

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, M/S Al-Mustafa Contractor (Pvt) Limited Lahore

(Allied Bank Minerva Centre, Faisalabad)(Ittefaq Steel)

Reference # CED/TFL **34169** (Dr. Waseem Abbass)

Reference of the request letter # AMC/UETL/502-19

Dated: 12-11-2019

Dated: 12-11-2019

Tension Test Report (Page -1/1)

Date of Test 13-11-2019 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		rea 1 ²)	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.364	3	0.369	0.11	0.107	2800	4100	56200	57610	82200	84400	1.50	18.8	
2	0.373	3	0.373	0.11	0.110	3200	4900	64200	64380	98200	98600	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			Note: only two samples for tensile and one sample for bend test											
""	D D	100	DI 1	1000:	0	,	Bend T	est est						
#3	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
- 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 Ghulam Rasul Iron Store Punjab University Co-Operative Housing Society Lahore

Reference # CED/TFL **34170** (Dr. Waseem Abbass)

Reference of the request letter # Nil

Dated: 12-11-2019

Dated: 12-11-2019

Tension Test Report (Page -1/1)

Date of Test 13-11-2019 Gauge length 8 inches

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

Sr. No.	Weight	Diam Si			rea 1 ²)	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.368	3	0.371	0.11	0.108	3900	4900	78200	79400	98200	99800	1.00	12.5	
-	-	-	-	•	-	-	-	-	-	-	-	-	-	
-	-	•	•	•	-	-	-	•	-	•	-	-	-	
-	-	•	•	•	-	-	-	-	-	-	-	-	-	
-	-	•	•	•	-	-	-	-	-	-	-	-	-	
-	-	•	•	•	-	-	-	•	-	•	-	-	-	
		Note: only two samples for tensile and one sample for bend test												
							D 17							
#3	Bar Ben	d Test T	Γhrough	180° is	s Satisfa	ctory	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.
- 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 Pak Arab Services
Bahawalpur
(Const of GS Br Complex for HQ. Centeral Comd at Khn Gar)

Reference # CED/TFL **34171** (Dr. Waseem Abbass)

Reference of the request letter # CEA-24/NZ/2019

Dated: 12-11-2019

Dated: 12-11-2019

Tension Test Report (Page -1/1)

Date of Test 13-11-2019 Gauge length 8 inches

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

Sr. No.	Weight	Si	meter/ lize (in²)			Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	Elongation	Remarks	
S	(lbs/ft)	Nominal			Actual	(kg)	(kg)	Nominal	Nominal Actual		Actual	(inch)	H %	Re	
1	0.365	3/8	0.369	0.11	0.107	2700	4000	54100	55520	80200	82300	1.20	15.0		
-	-	-	-	-	-	-	-	-	-	-	-	-	-		
-	-	-	-	-	-	-	-	-	-	-	-	-	-		
-	-	-	-	-	-	-	-	-	-	-	-	-	-		
-	•	-	-	-	-	-	-	-	-	-	-	-	•		
-	-	-	-	-	-	-	-	-	-	-	-	-	-		
			N	ote: on	ly one s	sample fo	r tensile	and one	sample f	or bend t	est				
							Bend T	est							
3/8	" Dia Ba	ar Bend	Test Th	nrough	' Dia 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
- 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,

Sub Divisional Officer

Highway Sub Division No. II

Gujranwala

(Rehabilitation/ Wiening of Road from Qila Mian Sing to Dughal Morr Length 9.0 km in District

Gujranwala)

Reference # CED/TFL **34172** (Dr. Waseem Abbass)

Reference of the request letter # 288/G-II

Dated: 12-11-2019 Dated: 31-10-2019

Tension Test Report (Page -1/1)

Date of Test 13-11-2019
Gauge length 8 inches

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

Sr. No.	Weight	Diameter/ size		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.422	3	0.397	0.11	0.124	3700	4500	74200	65740	90200	80000	1.70	21.3	
-	-	•	-	•	-	-	-	•	-	-	-	-	•	
-	-	•	-	•	-	-	-	•	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	•	-	-	-	-	-	-	-	-	-	
-	-	-	-	•	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile and one sample for bend test														
#3	Bend Test #3 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
- 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,
Project Manager
Star Engineering
Lahore Sialkot Motorway (BOT) Project

Reference # CED/TFL **34175** (Dr. M Rizwan Riaz) Dated: 13-11-2019 Reference of the request letter # Star Engineering/PM/LSM/2019/01 Dated: 13-11-2019

Tension Test Report (Page – 1/1)

Date of Test 13-11-2019

Gauge length -----

Description Chain Link Fance Wire Tensile Test

Sr. No.	Diameter Wire (mm)	Breaking Load (kN)	Remarks				
1	3.10	2.70					
-	-	-					
-	-	-					
-	-	-					
-	-	-					
-	-	-					
-	-	-					
-	-	-					
Only One Sample 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