

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
নির্বাহী প্রকৌশলী (সওজ) এর কার্যালয়
উপকরণ পরীক্ষা ও রক্ষণাবেক্ষণ বিভাগ
বাংলাদেশ সড়ক গবেষণাগার, মিরপুর, ঢাকা
eemtm@rhd.gov.bd

স্মারক নং-৩৫.০১.০০০০.৩৭৮.২২০.২২- ৩৩২

তারিখঃ ০৪/০৫/২০২৬ খ্রিঃ

বিষয়ঃ Repair & Maintenance of Existing damaged road surface by HBB and other ancillary works at 2nd km (P), 3rd km (P), 4th km (P), 5th km (P), 6th km (P) & 7th km (P) of Kalampur- Bannakhola-Bannol-BMP Bazar-Raghunatpur-Paragram Road (Z-5065) under Road Division Manikganj during the Year 2025-2026 ব্যবহৃত মালামাল পরীক্ষার ফলাফল প্রেরণ প্রসঙ্গে।

সূত্রঃ তার দপ্তরের স্মারক নং- ৩৫.০১.২৬১৪.৮১১.৪১.০০৮.২৬-১১৯; তারিখঃ ০৮.০৩.২০২৬ খ্রিস্টাব্দ।

উপর্যুক্ত বিষয় ও সূত্র স্মারকের প্রেক্ষিতে তার দপ্তর নমুনা পরীক্ষা করত: পরীক্ষালব্ধ ফলাফল পরবর্তী প্রয়োজনীয় ব্যবস্থা গ্রহণের জন্য প্রেরণ করা হলো।

সংযুক্তঃ পরীক্ষার ফলাফল ০৭ (সাত) পাতা, ০১ (এক) প্রস্থ।

Fairha Azam
০৪/০৫/২০২৬

ফারিহা আজম

নির্বাহী প্রকৌশলী, সওজ (চঃদাঃ)

পরিচিতি নম্বর: ৬০২২৯৫

ফোন: ০২-৫৮০৫৪৬২৭

উপ বিভাগীয় প্রকৌশলী, সওজ
নয়ারহাট সড়ক উপ-বিভাগ,
মানিকগঞ্জ।

অনুলিপিঃ

১। পরিচালক (তঃপ্রঃ, সওজ) বাংলাদেশ সড়ক গবেষণাগার, মিরপুর, ঢাকা।


২। সিনিয়র সিস্টেম এনালিস্ট (সওজ), ম্যানেজমেন্ট ইনফরমেশন সেল, সড়ক ভবন, তেজগাঁও, ঢাকা) (টেস্ট রিপোর্টটি সওজ এর ওয়েবসাইটে প্রকাশের জন্য অনুরোধ করা হলো)।


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Material Testing & Maintenance Division
Paikpara, Mirpur, Dhaka, Bangladesh


WATER ABSORPTION TEST OF BRICKS
DATA & REPORT SHEET

Client	SDE, RHD, Nayarhat Road Sub-Division, Manikganj.				
Memo No	35.01.2614.811.41.008.26-119	Date	8/3/2026		
Project / Work	Repair & Maintenance of Existing damaged road surface by HBB and other ancillary works at 2nd km (P), 3rd km (P), 4th km (P), 5th km (P), 6th km (P) & 7th km (P) of Kalampur- Bannakhola-Bannol-BMP Bazar-Raghunatpur-Paragram Road (Z-5065) under Road Division Manikganj during the Year 2025-2026.				
Date of receive at Lab	23/04/2026	Date of Test	27/04/2026		
Sample description	Auto Bricks				
Quantity supplied	5 Nos.	Lab No.	82		
Name of Agency	M/S Rony Enterprise				
Data Analysis					
Test No:	Oven-Dry Wt. W1 gm	S.S.D. Wt. W2 gm	Wt. of Water $W3 = (W2 - W1)$ gm	Water Absorption = $(W3 \setminus W1) \times$ 100 %	Specification Limit
1	3588	3884	296	8.25	Not exceed 16.67% (1/6 of its weight)
2	3460	4026	566	16.36	
3	3482	3756	274	7.87	
4	3505	3752	247	7.05	
5	3419	3689	270	7.90	
Average %				9.48	

Note:- Test was performed on the basis of supplied sample


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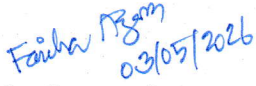
**DIMENSION OF BRICKS
DATA & REPORT SHEET**

Client	SDE, RHD, Nayarhat Road Sub-Division, Manikganj.			
Memo No	35.01.2614.811.41.008.26-119	Date	8/3/2026	
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Date of receive at lab	23/04/2026	Date of Test	27/04/2026	
Sample description	Auto Bricks			
Quantity supplied	5 Nos.	Lab No.	82	
Name of Agency	M/S Rony Enterprise			
Data Analysis				
Test No:	Length of Bricks (mm)	Width of Bricks (mm)	Height of Bricks (mm)	Specification Limit. (After Burning)
1	240	114	70	240mm× 115m×70mm
2	240	115	70	
3	240	115	69	
4	239	114	69	
5	238	115	70	

Note:- Test was performed on the basis of supplied sample


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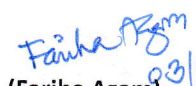
**UNIT WEIGHT OF COARSE AGGREGATE (Oven-Dry Basis)
DATA & REPORT SHEET**

Client	SDE, RHD, Nayarhat Road Sub-Division, Manikganj.				
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Date of receive at Lab	23/04/2026	Date of Test	27/04/2026		
Sample description	Auto Bricks				
Quantity supplied	5 Nos.	Lab No.	82		
Name of Agency	M/S Rony Enterprise				
Mould Calibration					
Weight of water to fill the mould: (W) kg	9.406				
Water Temp 0C	25 0C				
Density of water (D) Kg/m3	998.6				
DATA ANALYSIS					
Test No.	Wt. of Agg+Mould W1Kg	Wt. of Mould W2 kg	Wt. of Agg W3 (W1 - W2) kg	Unit Wt. of Agg = (W3×D)/ W kg/m3	Specification Limit
1	13.954	2.844	11.11	1179.51

Note:- Test was performed on the basis of supplied sample


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**COMPRESSIVE STRENGTH TEST OF BRICKS
DATA & REPORT SHEET**

Client		SDE, RHD, Nayarhat Road Sub-Division, Manikganj.								
Memo No		35.01.2614.811.41.008.26-119					Date		8/3/2026	
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Date of receive at lab		23/04/2026					Date of Test		27/04/2026	
Sample description		Auto Bricks								
Quantity supplied		5 Nos.			Lab No.			82		
Name of Agency		M/S Rony Enterprise								
Data Analysis										
						CF		(0.9725*X)+15.326		
Test No:	Frog Marks	Specimen Surface Area, mm ²		Average Area, A= (A ₁ +A ₂)/2 mm ²	Load, P KN	Corrected Load, P KN	Strength			Remarks
		Top A1	Bottom A2				S1= (P/A)* 1000 N/mm ²	S2= S1×10.2 Kg/cm ²	S3= S1× 145 psi	
1	⋮	12880	12654	12767.00	270.00	277.901	21.77	222.02	3156.23	1st Class Bricks not less than 17/Nmm ² & P J Bricks not less than 20/Nmm ² .
2		12882	13224	13053.00	380.00	384.876	29.49	300.75	4275.42	
3		12876	12992	12934.00	290.00	297.351	22.99	234.50	3333.53	
4		12765	12995	12880.00	240.00	248.726	19.31	196.97	2800.10	
5		12880	12995	12937.50	235.00	243.8635	18.85	192.26	2733.16	
Average							22.48	229.30	3259.69	
Average Strength= 22.48 N/mm ² = 229.30 Kg/cm ² =3259.69 PSI										

Note:- Test was performed on the basis of supplied sample


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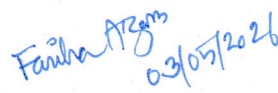
**SIEVE ANALYSIS OF AGGREGATES
DATA & REPORT SHEET**

Client		SDE, RHD, Nayarhat Road Sub-Division, Manikganj.			
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Date of receive at Lab		23/04/2026	Date of Test	27/04/2026	
Sample description		Sub base Materials			
Quantity supplied		One Bag. (30 kg)	Lab No.	82	
Name of Agency		M/S Rony Enterprise			
SIEVE ANALYSIS DATA					
Weight of Dry Sample = 10000gm					
STANDARD OPENING, (mm)	WEIGHT RETAINED, (gm)	% RETAINED	CUMULATIVE % RETAINED	%PASSING	Specification Limit RHD Technical Spe. Table 3.3-1(A)
50	0	0	0	100	100
38	595	5.95	5.95	94.05	85-100
20	2564	25.64	31.59	68.41	55-95
10	1214	12.14	43.73	56.27	35-75
5	1539	15.39	59.12	40.88	25-60
2.4	699	6.99	66.11	33.89	15-50
0.6	989	9.89	76	24	7-35
0.3	1014	10.14	86.14	13.86	6-27
0.075	782	7.82	93.96	6.04	3-15
Pan weight	435
Loss	169

Note:- Test was performed on the basis of supplied sample


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AGGREGATE CRUSHING VALUE
DATA & REPORT SHEET

Client	SDE, RHD, Nayarhat Road Sub-Division, Manikganj.		
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Date of receive at Lab	23/04/2026	Date of Test	27/04/2026
Sample description	Bricks Chips (Sub base)		
Quantity supplied	One Bag. (30 kg)	Lab No.	82
Name of Agency	M/S Rony Enterprise		
AGGREGATE CRUSHING VALUE			
Test No.	1	2	Specification Limit
Wt. of Sample (Surface Dry) A gm	1584	1570	Not greater than 38%
Wt. of Passing (through #8 Sieve) B gm	488	495	
Aggregate Crushing Value = (B/A) X100%	30.81	31.53	
Mean Value (ACV) %	31.17		

Note:- Test was performed on the basis of supplied sample


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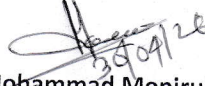
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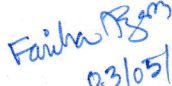
**FINENESS MODULUS OF F.A.
DATA & REPORT SHEET**

Client		SDE, RHD, Nayarhat Road Sub-Division, Manikganj.			
Memo No		35.01.2614.811.41.008.26-119	Date	8/3/2026	
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Date of receive at Lab		23/04/2026	Date of Test	27/04/2026	
Sample description		Local Sand			
Quantity supplied		One Bag. (5 kg)	Lab No.	82	
Name of Agency		M/S Rony Enterprise			
SIEVE ANALYSIS DATA (F.M.)					
Weight of Dry Sample = 500gm					
STANDARD SIEVE SIZE	STANDARD OPENING, (mm)	WEIGHT RETAINED, (gm)	% RETAINED	CUMULATIVE % RETAINED	%PASSING
#8	2.4	3	0	0	100
#16	1.2	6	1.2	1.2	98.8
#30	0.6	58	11.6	12.8	87.2
#50	0.3	96	19.2	32	68
#100	0.15	158	31.6	63.6	36.4
	Pan weight	178.36	FM	1.10	...
	Loss	0.64
Results: FM Value 1.10					

Note:- Test was performed on the basis of supplied sample


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