



AGGREGATE SUBMITTAL
Report of Physical Properties

GRP Material Description: Roadbase, 1.5" UDOT UTBC **Report Date:** January 19, 2024
GRP Material Code: GRAD **Reviewed by:** Dan McDaniel
Source Location/Code: Pelican Point / 520 **Report No.:** 520GRAD00124

TEST RESULTS				
Standard	PHYSICAL PROPERTIES		Result	Test Source
ASTM C 29 AASHTO T19	Unit Weight	Unit Weight, lbs./cu.ft. =	114	
	Weight	Voids, % =	31	
		<input type="checkbox"/> Jig <input type="checkbox"/> Ld <input checked="" type="checkbox"/> Rodd		
ASTM D1557 AASHTO T180	Modified Proctor	Max. density, lbs./cu.ft. =	144.2	
		Optimum Moisture, % =	5.5	
ASTM D698 AASHTO T99	Standard Proctor	Max. density, lbs./cu.ft. =	141.0	
		Optimum Moisture, % =	6.7	
ASTM D4318 AASHTO T89/90	Liquid Limit Plastic Limit Plasticity Index	Liquid Limit=	0	
		Plastic Limit=	0	
		Plasticity Index=	NP	
ASTM C131 AASHTO T96	L.A. Abrasion	Small Coarse Loss, % =	22.0	
		Grading/Revolutions, =	A/500	
ASTM C535	L.A. Abrasion	Large Coarse Loss, % =		
		Grading/Revolutions, =		
ASTM C 128 AASHTO T84	Fine Specific Gravity & Absorption	Bulk Specific Gravity (dry) =		
		Bulk Specific Gravity, SSD =		
		Apparent Specific Gravity =		
		Absorption, % =		
ASTM C 127/128 AASHTO T85/84	Coarse/Fine Specific Gravity & Absorption	Bulk Specific Gravity (dry) =	2.628	
		Bulk Specific Gravity, SSD =	2.650	
		Apparent Specific Gravity =	2.688	
		Absorption, % =	0.9	
ASTM D2419 AASHTO T176	Sand Equivalent	Sand Equivalent, % =	65	
ASTM C 88 AASHTO T104	Soundness	Coarse Soundness Loss, % =	1	
		Sodium No. of Cycles =	5	
	Soundness	Fine Soundness Loss, % =	1.5	
		7575	5	
ASTM C 1252 AASHTO T304	Fine Aggregate Angularity	Uncompacted Voids, % =		
		Method C (as received material)		
ASTM C40 AASHTO T21	Organic Impurities	Coarse Aggregate, % =		
		Fine Aggregate, % =		
ASTM C142 AASHTO T112	Clay / Friable Particles	Coarse Aggregate, % =		
		Fine Aggregate, % =		
ASTM C123 AASHTO T113	Lightweight Pieces	Coarse Aggregate, % =		
		Fine Aggregate, % =		
ASTM D1883 AASHTO T193	CBR	Surcharge = 10 lbs CBR @ 0.1"=	75	
		Swell% = 0.0% CBR @ 0.2"=	118	
ASTM D5821	Fractured Face	1 or 2 Faces =	1 = 100	
		Fractured Face, % =	2 = 94	
ASTM D2487	Soil Classification	Group Symbol =		
		Group Name =		
ASTM D2488	Soil Description & Identification	Group Symbol =		
		Group Name =		

SIEVE ANALYSIS		
ASTM C136	AASHTO T27	
Sieve Size	% Passing	Spec.
450 mm (18")		
375 mm (15")		
300 mm (12")		
250 mm (10")		
225 mm (9")		
200 mm (8")		
150 mm (6")		
125 mm (5")		
100 mm (4")		
75.0 mm (3")		
63.0 mm (2-1/2")		
50.0 mm (2")		
37.5 mm (1-1/2")	100	
25.0 mm (1")	91	82-100
19.0 mm (3/4")	85	76-94
12.5 mm (1/2")	75	66-84
9.5 mm (3/8")	65	56-74
6.3 mm (1/4")		
4.75 mm (No.4)	54	47-61
2.36 mm (No.8)	45	
2.00 mm (No.10)		
1.18 mm (No.16)	31	26-36
0.600 mm (No.30)	21	
0.425 mm (No.40)		
0.300 mm (No.50)	16	
0.180 mm (No.80)		
0.150 mm (No.100)	14	
0.075 mm (No.200)	8.7	5.7-11.7
ASTM D422		
Hydrometer =		
ASTM C566 AASHTO T255		
Moisture Content, % =		
ASTM C136 AASHTO T27		
Fineness Modulus (FM) =		
AASHTO M145		
Classification of Soils =	A1A	
ASTM D4791 Ratio =	5:1	
Flat & Elongated, % =	0	