CONCRETE, SAND, AND GRAVEL WORKSHEET

North Dakota Department of Transportation, Materials & Research

SFN 2455 (Rev. 03-2015)

Project	PCN
Submitted By	Date Received

GRAVEL

Pit Location	
Owner	
Sampled From	
Date Sampled	Field Sample Number
Lab. Number	Size Number

Soundness % Loss - AASHTO T-104 Tested By _____
Specific Gravity - ND T-85 Tested By _____
% Absorption - ND T-85 Tested By _____
L.A. Abrasion (Grad.) % Loss - AASHTO T-96 Tested By _____
Wt. Rodded lb./c.f. (kg/m ^{3}) - AASHTO T-19 Tested By _____
% Moisture ND T-255 Tested By _____

(mm)	Ret.	Wt. Ret.		% Ret.	% Pass	ND Spec.
		Non-Cum.	Cum.			
100	4"					
90	3 1/2"					
75	3"					
63	2 1/2"					
50	2"					
37.5	1 1/2"					
25.0	1"					
19.0	3/4"					
16.0	5/8"					
12.5	1/2"					
9.5	3/8"					
4.75	No. 4					
2.36	No. 8					
Minus No. 8						
Wt.Check						
Original Wt.						
Fineness Modulus						

ND T-27 Tested By: _____

SAND

Pit Location	
Owner	
Sampled From	
Date Sampled	Field Sample Number
Lab. Number	

Soundness % Loss - AASHTO T-104 Tested By _____
Specific Gravity - ND T-84 Tested By _____
% Absorption - ND T-84 Tested By _____
Color - AASHTO T-21 Tested By _____
Wt. Loose lb./c.f.(kg/m^3) - AASHTO T-19 Tested By _____
% Moisture ND T-255 Tested By _____

(mm)	Ret.	Wt. Ret.		% Ret.	% Pass	ND Spec.
		Non-Cum.	Cum.			
9.5	3/8"					
4.75	No. 4					
2.36	No. 8					
2.00	No. 10					
1.18	No. 16					
600µm	No. 30					
425µm	No. 40					
300µm	No. 50					
150µm	No. 100					
75µm	No. 200					
Minus No. 200 (75µm)						
Original Wt.						
Wt. After Wash						
Wash Loss						
Wt. Check						
Fineness Modulus						

* Attention Advised

ND T-11 Tested By: _____

ND T-27 Tested By: _____

☐ _____ District

☐ Central Lab.

Date	Testing Lab Supervisor

Weight of Plus No. 4 Fraction
Weight of Total Sample

COARSE AGGREGATE

LAB. NO G

Grams in Plus 4 Fraction		Maximum % by Weight of the Plus No. 4 Fraction	% by Wt.
	(a) Shale	0.7	
	(b) Iron oxide particles	4.0*	
	(c) Lignite and other coal	0.5	
	(d) Soft particles exclusive of items a, b, c (includes clay and other friable material)	2.5	
	(e) Thin or elongated pieces (maximum thickness less than 1/4 the maximum width, or maximum length more than three times the maximum width)	15.0	

NDDOT 3 Tested By: _____

	(f) Dry weight before washing - Dry weight after washing - Material passing No. 200 sieve % of total sample	1.0	

ND T-11 Tested By: _____

*Note: For small repairs and for bridgedeck overlays, the maximum iron oxide particles shall be 2.0%.

FINE AGGREGATE

LAB. NO S-

	Maximum % by Weiqht	% by Wt.
(a) Lightweight pieces in aggregate_____	2.0	

☐ Approved
☐ Not Approved

ND T-113 Tested By: _____