

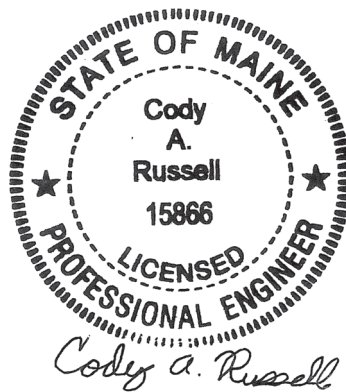
**MAINE DEPARTMENT OF TRANSPORTATION
HIGHWAY PROGRAM
GEOTECHNICAL SECTION
AUGUSTA, MAINE**

GEOTECHNICAL DATA REPORT

For Safety Improvements on

**ROUTE 202 & 11
LEBANON, MAINE**

Prepared by:
Yueh-Ti Lee
Assistant Geotechnical Engineer



Reviewed by:
Cody Russell, P.E.
Senior Geotechnical Engineer

York County
WIN 26288.00

March 20, 2025

Soils Report 2025-12
Federal Project No. 2628800

INTRODUCTION

The purpose of this data report is to document subsurface information collected for the Safety Improvements project at the intersection of Route 202, Center Road, and Long Swamp Road, as shown on the attached Location Map. This report presents the results of a limited geotechnical investigation performed along the proposed intersection reconstruction project. Route 202 is a Highway Corridor Priority 1 road. Center Road and Long Swamp Road are Highway Corridor Priority 5 roads.

SUBSURFACE INVESTIGATION

Two (2) borings (HB-LEB-101 and HB-LEB-102) were drilled along the proposed Long Swamp Road by an S.W. Cole drill crew. Exploration locations are presented in the attached Boring Location Plan. The details and sampling methods used, field data obtained, soil conditions encountered, and exploration locations are presented in the attached Boring Logs.

An NETTCP certified Subsurface Inspector logged the subsurface conditions encountered. The MaineDOT geotechnical engineer selected the boring and probe locations and drilling methods, designated type and depth of sampling techniques, reviewed boring and probe logs and identified field testing requirements. The borings and probes were located in the field using taped measurements at the completion of the drilling program.

CLOSURE

This Geotechnical Data Report has been prepared for the use of the MaineDOT Highway Program for specific application to the proposed Route 202 & 11 Safety Improvements project in Lebanon in accordance with generally accepted geotechnical and foundation engineering practices. No other intended use or warranty is expressed or implied.

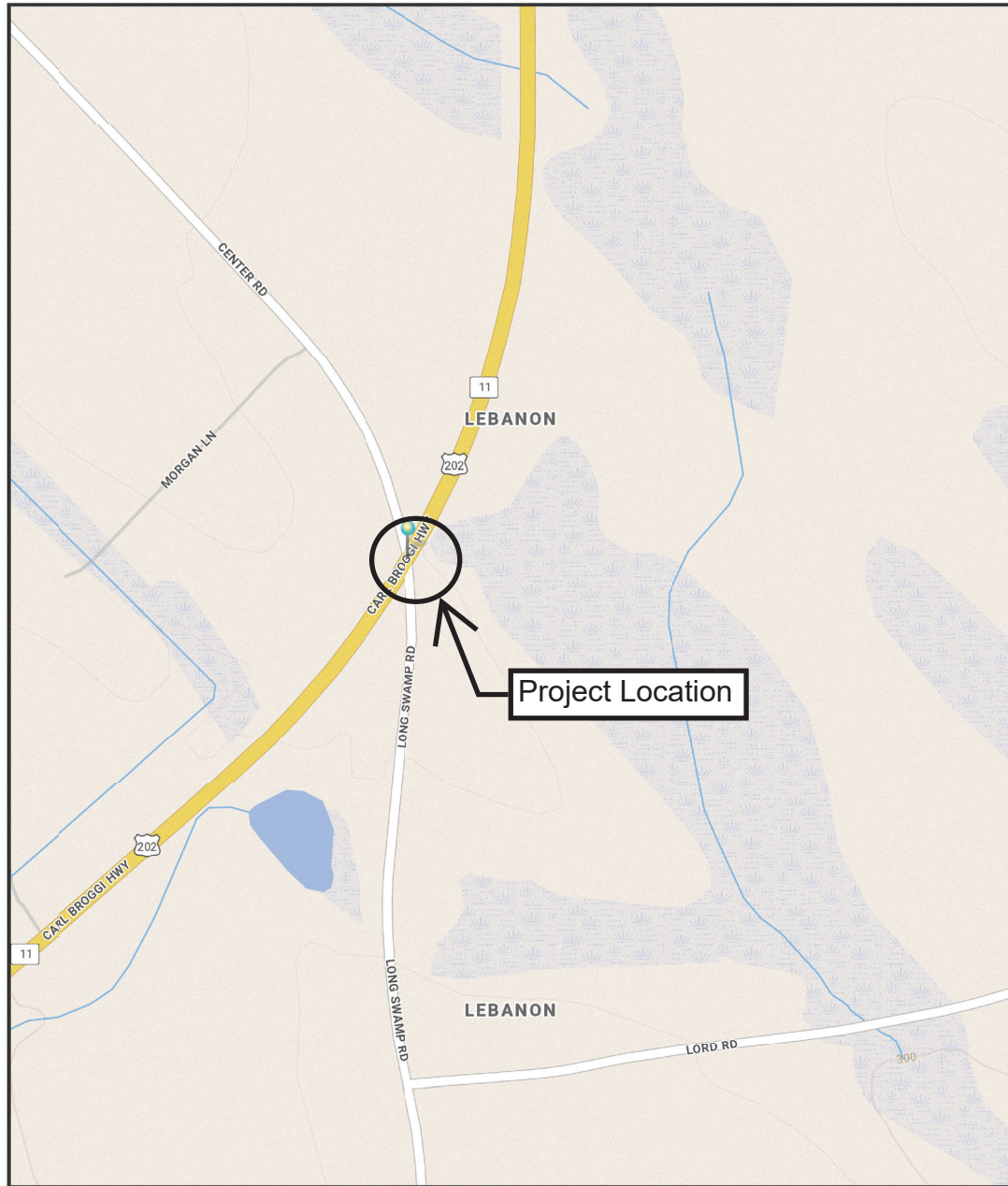
MaineDOT conducted a limited number of soil explorations at discrete locations along the project alignment. No interpretations or conclusions have been derived from this geotechnical information. MaineDOT shall not be responsible for the Bidder's or Contractor's interpretations, estimates, or conclusions derived from the geotechnical information. Data provided may not be representative of the subsurface conditions between exploration locations.

Attachments:

Location Map
Boring Location Plan
Key to Soil and Rock Descriptions and Terms
Boring Logs
Laboratory Testing Summary Sheet
Grain Size Distribution Curves



LEBANON, MAINE



The Maine Department of Transportation provides this publication for information only. Reliance upon this information is at user risk. It is subject to revision and may be incomplete depending upon changing conditions. The Department assumes no liability if injuries or damages result from this information. This map is not intended to support emergency dispatch.

0.063 Miles
1 inch = 0.07 miles

Date: 3/17/2025
Time: 7:28:21 AM

SHEET NUMBER

1

OF 2

LEBANON
ROUTE 202 & Route 11

LOCATION MAP

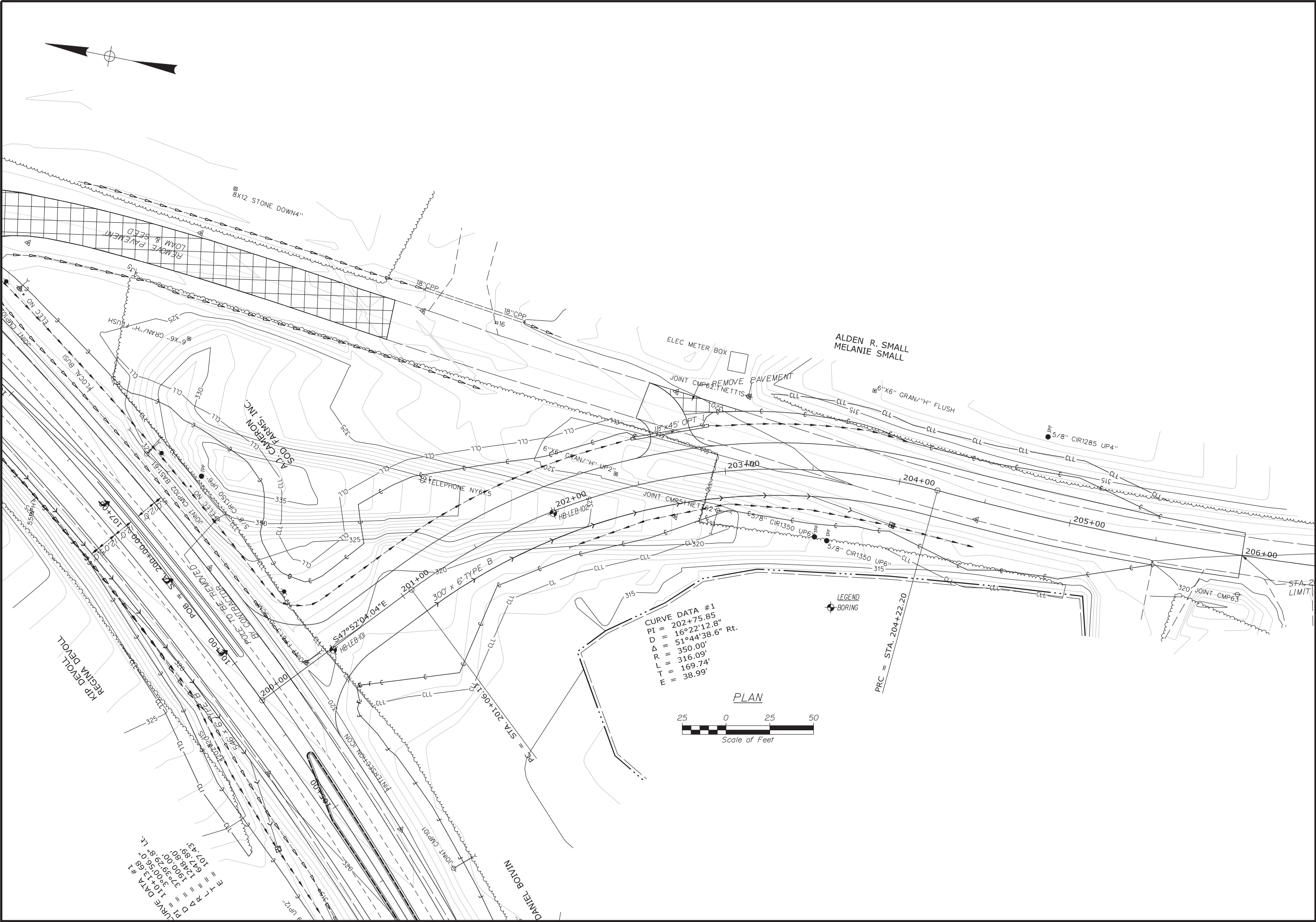
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2628800

WIN

26288.00

HIGHWAY PLANS



STATE OF MAINE DEPARTMENT OF TRANSPORTATION	PROJ. MANAGER		M. ROONEY	BY	DATE	SIGNATURE
	DESIGN-DETAILED		N. SEGLER		9-23	
	DESIGN2-DETAILED		C. RUSSELL	T. WHITE	OCT 2023	
	DESIGN3-DETAILED					
	REVISIONS 1					
2628800	REVISIONS 2					P.E. NUMBER
	REVISIONS 3					
	REVISIONS 4					
	FIELD CHANGES					
WIN 26288.00						DATE
HIGHWAY PLANS						

SHEET NUMBER	2	LEBANON
		ROUTE 202 & ROUTE 11
BORING LOCATION PLAN		

OF 2

UNIFIED SOIL CLASSIFICATION SYSTEM					MODIFIED BURMISTER SYSTEM					
MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES						
COARSE-GRAINED SOILS (more than half of material is larger than No. 200 sieve size)	GRAVELS (more than half of coarse fraction is larger than No. 4 sieve size)	CLEAN GRAVELS	GW	Well-graded gravels, gravel-sand mixtures, little or no fines.	Descriptive Term		Portion of Total (%)			
		(little or no fines)	GP	Poorly-graded gravels, gravel sand mixtures, little or no fines.	trace	0 - 10				
					little	11 - 20				
					some	21 - 35				
				adjective (e.g. Sandy, Clayey)	36 - 50					
					TERMS DESCRIBING DENSITY/CONSISTENCY					
	SANDS (more than half of coarse fraction is smaller than No. 4 sieve size)	GRAVEL WITH FINES (Appreciable amount of fines)	GM	Silty gravels, gravel-sand-silt mixtures.	Coarse-grained soils (more than half of material is larger than No. 200 sieve); Includes (1) clean gravels; (2) Silty or Clayey gravels; and (3) Silty, Clayey or Gravelly sands. Density is rated according to standard penetration resistance (N-value).					
		GC	Clayey gravels, gravel-sand-clay mixtures.							
FINE-GRAINED SOILS (more than half of material is smaller than No. 200 sieve size)	SILTS AND CLAYS (liquid limit less than 50)	CLEAN SANDS (little or no fines)	SW	Well-graded sands, Gravelly sands, little or no fines	Density of Cohesionless Soils		Standard Penetration Resistance			
			SP	Poorly-graded sands, Gravelly sand, little or no fines.			N-Value (blows per foot)			
		SANDS WITH FINES (Appreciable amount of fines)	SM	Silty sands, sand-silt mixtures	Fine-grained soils (more than half of material is smaller than No. 200 sieve); Includes (1) inorganic and organic silts and clays; (2) Gravelly, Sandy or Silty clays; and (3) Clayey silts. Consistency is rated according to undrained shear strength as indicated.					
			SC	Clayey sands, sand-clay mixtures.						
					Consistency of Cohesive soils		Approximate Undrained Shear Strength (psf)		Field Guidelines	
					SPT N-Value (blows per foot)					
					WOH, WOR, WOP, <2		0 - 250		Fist easily penetrates	
					2 - 4		250 - 500		Thumb easily penetrates	
					5 - 8		500 - 1000		Thumb penetrates with moderate effort	
					9 - 15		1000 - 2000		Indented by thumb with great effort	
					16 - 30		2000 - 4000		Indented by thumbnail	
					>30		over 4000		Indented by thumbnail with difficulty	
					Rock Quality Designation (RQD):					
					RQD (%) = $\frac{\text{sum of the lengths of intact pieces of core}^*}{\text{length of core advance}}$					
					*Minimum NQ rock core (1.88 in. OD of core)					
					Rock Quality Based on RQD					
				Rock Quality		RQD (%)				
				Very Poor		≤25				
				Poor		26 - 50				
				Fair		51 - 75				
				Good		76 - 90				
				Excellent		91 - 100				
					Desired Rock Observations (in this order, if applicable):					
					Color (Munsell color chart)					
					Texture (aphanitic, fine-grained, etc.)					
					Rock Type (granite, schist, sandstone, etc.)					
					Hardness (very hard, hard, mod. hard, etc.)					
					Weathering (fresh, very slight, slight, moderate, mod. severe, severe, etc.)					
					Geologic discontinuities/jointing:					
					-dip (horiz - 0-5 deg., low angle - 5-35 deg., mod. dipping - 35-55 deg., steep - 55-85 deg., vertical - 85-90 deg.)					
					-spacing (very close - <2 inch, close - 2-12 inch, mod. close - 1-3 feet, wide - 3-10 feet, very wide >10 feet)					
					-tightness (tight, open, or healed)					
					-infilling (grain size, color, etc.)					
					Formation (Waterville, Ellsworth, Cape Elizabeth, etc.)					
					RQD and correlation to rock quality (very poor, poor, etc.)					
					ref: ASTM D6032 and FHWA NHI-16-072 GEC 5 - Geotechnical Site Characterization, Table 4-12					
					Recovery (inch/inch and percentage)					
					Rock Core Rate (X.X ft - Y.Y ft (min:sec))					
					Sample Container Labeling Requirements:					
					WIN		Blow Counts			
					Bridge Name / Town		Sample Recovery			
					Boring Number		Date			
					Sample Number		Personnel Initials			
					Sample Depth					
Maine Department of Transportation Geotechnical Section Key to Soil and Rock Descriptions and Terms Field Identification Information										

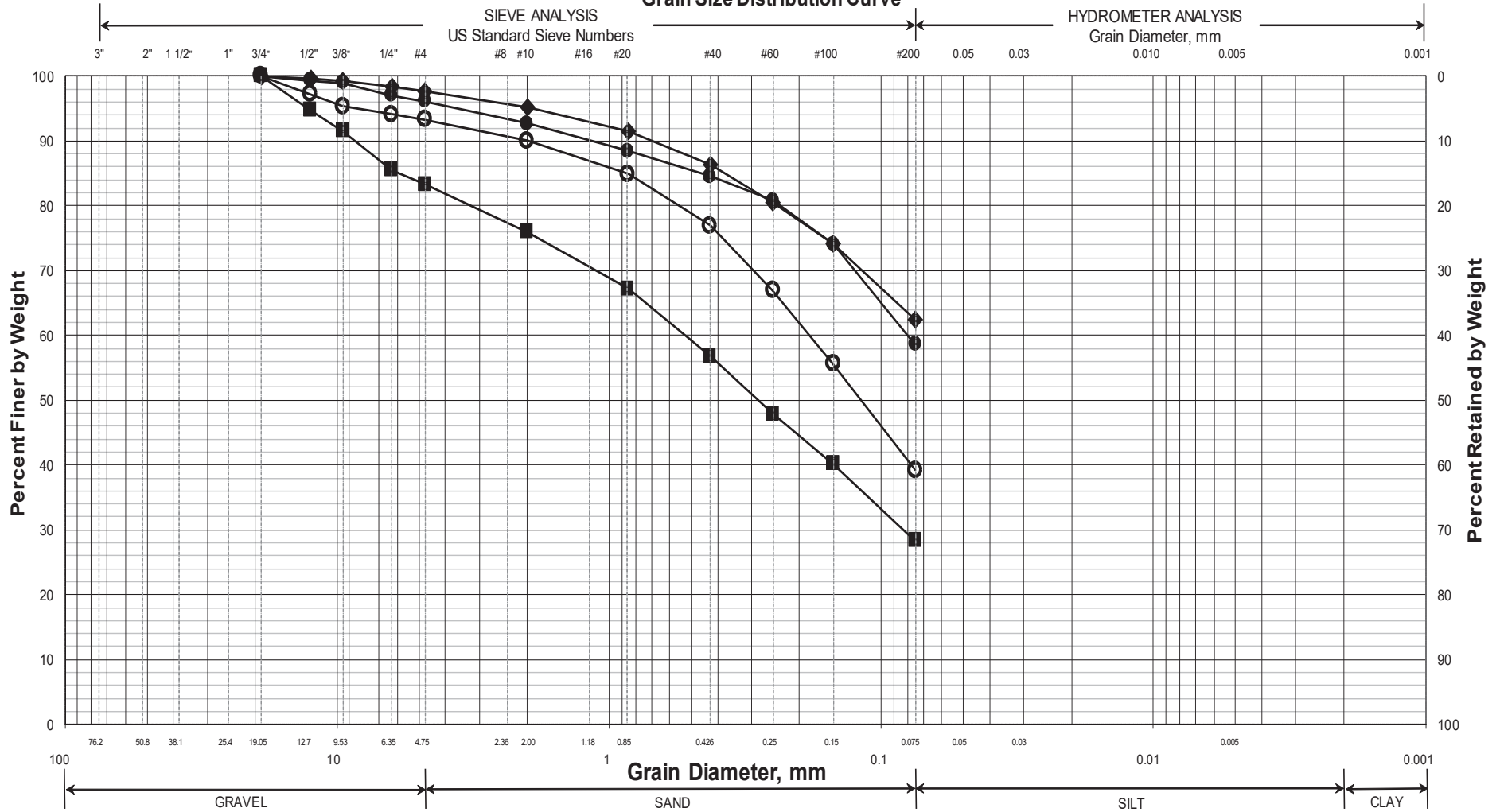
Maine Department of Transportation Soil/Rock Exploration Log US CUSTOMARY UNITS				Project: Intersection Route 202, Center Street and Long Swamp Road Location: Lebanon, Maine				Boring No.: HB-LEB-101 WIN: 26288.00			
Driller: S.W. Cole				Elevation (ft.): 320.0				Auger ID/OD: 5" Dia.			
Operator: Matt/John				Datum: NAVD88				Sampler: Standard Split Spoon			
Logged By: B. Wilder				Rig Type: Mobile B-48				Hammer Wt./Fall: 140#/30"			
Date Start/Finish: 10/17/2023; 08:00-09:30				Drilling Method: Solid Stem Auger				Core Barrel: N/A			
Boring Location: 200+50.1, 0.9 ft Rt.				Casing ID/OD: N/A				Water Level*: 11.0 ft bgs.			
Hammer Efficiency Factor: 0.91				Hammer Type: Automatic <input checked="" type="checkbox"/> Hydraulic <input type="checkbox"/> Rope & Cathead <input type="checkbox"/>							
Definitions: D = Split Spoon Sample MD = Unsuccessful Split Spoon Sample Attempt U = Thin Wall Tube Sample MU = Unsuccessful Thin Wall Tube Sample Attempt V = Field Vane Shear Test, PP = Pocket Penetrometer MV = Unsuccessful Field Vane Shear Test Attempt R = Rock Core Sample SSA = Solid Stem Auger HSA = Hollow Stem Auger RC = Roller Cone WOH = Weight of 140lb. Hammer WOR/C = Weight of Rods or Casing WO1P = Weight of One Person S _u = Peak/Remolded Field Vane Undrained Shear Strength (psf) S _{u(lab)} = Lab Vane Undrained Shear Strength (psf) q _p = Unconfined Compressive Strength (ksf) N-uncorrected = Raw Field SPT N-value Hammer Efficiency Factor = Rig Specific Annual Calibration Value N ₆₀ = SPT N-uncorrected Corrected for Hammer Efficiency N ₆₀ = (Hammer Efficiency Factor/60%)*N-uncorrected T _v = Pocket Torvane Shear Strength (psf) WC = Water Content, percent LL = Liquid Limit PL = Plastic Limit PI = Plasticity Index G = Grain Size Analysis C = Consolidation Test											
Sample Information											
Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N ₆₀	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/18	0.00 - 2.00	1/1/1/8	2	3	SSA	319.5		Top Soil, Grass and Roots.	G#379681 A-4, SM WC=23.3%
								315.5		1D (0.5-2.0ft bgs.) Light brown, damp, very loose, Silty fine to coarse SAND, trace gravel.	
5	2D	24/20	5.00 - 7.00	14/18/22/26	40	61				Grey brown, damp, hard, SILT, some fine to coarse sand, trace gravel.	G#379682 A-4, CL WC=12.4%
10	3D	6/5	10.00 - 10.50	50(6")	---					Grey brown, damp, hard, SILT, some fine to coarse sand, trace gravel.	
15								306.0		(From Auger Flight) Grey, moist, fine to medium SAND, some silt. Cobble from 14.0-14.3 ft bgs.	
								305.0		Bottom of Exploration at 15.0 feet below ground surface. NO REFUSAL	
20											
25											
Remarks:											
Stratification lines represent approximate boundaries between soil types; transitions may be gradual.										Page 1 of 1	
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.										Boring No.: HB-LEB-101	

Maine Department of Transportation Soil/Rock Exploration Log US CUSTOMARY UNITS				Project: Intersection Route 202, Center Street and Long Swamp Road Location: Lebanon, Maine				Boring No.: HB-LEB-102 WIN: 26288.00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Driller: S.W. Cole				Elevation (ft.): 326.4				Auger ID/OD: 5" Dia.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Operator: Matt/John				Datum: NAVD88				Sampler: Standard Split Spoon																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Logged By: B. Wilder				Rig Type: Mobile B-48				Hammer Wt./Fall: 140#/30"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Date Start/Finish: 10/17/2023; 09:30-10:30				Drilling Method: Solid Stem Auger				Core Barrel: N/A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Boring Location: 201+98.9, 1.6 ft Rt.				Casing ID/OD: N/A				Water Level*: 14.0 ft bgs.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Hammer Efficiency Factor: 0.91				Hammer Type: Automatic <input checked="" type="checkbox"/> Hydraulic <input type="checkbox"/> Rope & Cathead <input type="checkbox"/>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
<div>Definitions: D = Split Spoon Sample MD = Unsuccessful Split Spoon Sample Attempt U = Thin Wall Tube Sample MU = Unsuccessful Thin Wall Tube Sample Attempt V = Field Vane Shear Test, PP = Pocket Penetrometer MV = Unsuccessful Field Vane Shear Test Attempt</div> <div>R = Rock Core Sample SSA = Solid Stem Auger HSA = Hollow Stem Auger RC = Roller Cone WOH = Weight of 140lb. Hammer WOR/C = Weight of Rods or Casing WO1P = Weight of One Person</div> <div>S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf) S_{u(lab)} = Lab Vane Undrained Shear Strength (psf) q_p = Unconfined Compressive Strength (ksf) N-uncorrected = Raw Field SPT N-value Hammer Efficiency Factor = Rig Specific Annual Calibration Value N₆₀ = SPT N-uncorrected Corrected for Hammer Efficiency N₆₀ = (Hammer Efficiency Factor/60%)*N-uncorrected</div> <div>T_v = Pocket Torvane Shear Strength (psf) WC = Water Content, percent LL = Liquid Limit PL = Plastic Limit PI = Plasticity Index G = Grain Size Analysis C = Consolidation Test</div>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
<table><thead><tr><th rowspan="2">Depth (ft.)</th><th colspan="7">Sample Information</th><th rowspan="2">Elevation (ft.)</th><th rowspan="2">Graphic Log</th><th rowspan="2">Visual Description and Remarks</th><th rowspan="2">Laboratory Testing Results/ AASHTO and Unified Class.</th></tr><tr><th>Sample No.</th><th>Pen./Rec. (in.)</th><th>Sample Depth (ft.)</th><th>Blows (6 in.) Shear Strength (psf) or RQD (%)</th><th>N-uncorrected</th><th>N₆₀</th><th>Casing Blows</th></tr></thead><tbody><tr><td>0</td><td>1D</td><td>24/11</td><td>0.00 - 2.00</td><td>2/5/9/6</td><td>14</td><td>21</td><td>SSA</td><td>326.0</td><td rowspan="10"></td><td rowspan="10">Topsoil, Roots and Grass. 0.4 1D (0.4-2.0 ft bgs.) Light brown, damp, medium dense, fine to coarse SAND, some silt, little gravel. 5.0 Light brown, damp, soft, fine to coarse Sandy SILT, trace gravel. 10 Light brown, moist, very stiff, fine to coarse Sandy SILT, trace gravel. 15 Light brown, moist, hard, fine to coarse Sandy SILT, trace gravel. Occasional cobbles from 17.0-20.0 ft bgs. 20.0 Bottom of Exploration at 20.0 feet below ground surface. NO REFUSAL</td><td rowspan="10">G#379683 A-2-4, SM WC=7.5%</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>5</td><td>2D</td><td>24/19</td><td>5.00 - 7.00</td><td>1/1/1/1</td><td>2</td><td>3</td><td></td><td>321.4</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>10</td><td>3D</td><td>24/14</td><td>10.00 - 12.00</td><td>6/6/7/8</td><td>13</td><td>20</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>15</td><td>4D</td><td>24/20</td><td>15.00 - 17.00</td><td>19/21/21/50</td><td>42</td><td>64</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>20</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>306.4</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>25</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table>												Depth (ft.)	Sample Information							Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N ₆₀	Casing Blows	0	1D	24/11	0.00 - 2.00	2/5/9/6	14	21	SSA	326.0		Topsoil, Roots and Grass. 0.4 1D (0.4-2.0 ft bgs.) Light brown, damp, medium dense, fine to coarse SAND, some silt, little gravel. 5.0 Light brown, damp, soft, fine to coarse Sandy SILT, trace gravel. 10 Light brown, moist, very stiff, fine to coarse Sandy SILT, trace gravel. 15 Light brown, moist, hard, fine to coarse Sandy SILT, trace gravel. Occasional cobbles from 17.0-20.0 ft bgs. 20.0 Bottom of Exploration at 20.0 feet below ground surface. NO REFUSAL	G#379683 A-2-4, SM WC=7.5%																																																																																		5	2D	24/19	5.00 - 7.00	1/1/1/1	2	3		321.4																																																																																10	3D	24/14	10.00 - 12.00	6/6/7/8	13	20																																																																																													15	4D	24/20	15.00 - 17.00	19/21/21/50	42	64																																																																																													20								306.4																																																																																											25										
Depth (ft.)	Sample Information							Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N ₆₀	Casing Blows																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
0	1D	24/11	0.00 - 2.00	2/5/9/6	14	21	SSA	326.0		Topsoil, Roots and Grass. 0.4 1D (0.4-2.0 ft bgs.) Light brown, damp, medium dense, fine to coarse SAND, some silt, little gravel. 5.0 Light brown, damp, soft, fine to coarse Sandy SILT, trace gravel. 10 Light brown, moist, very stiff, fine to coarse Sandy SILT, trace gravel. 15 Light brown, moist, hard, fine to coarse Sandy SILT, trace gravel. Occasional cobbles from 17.0-20.0 ft bgs. 20.0 Bottom of Exploration at 20.0 feet below ground surface. NO REFUSAL	G#379683 A-2-4, SM WC=7.5%																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
5	2D	24/19	5.00 - 7.00	1/1/1/1	2	3		321.4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
10	3D	24/14	10.00 - 12.00	6/6/7/8	13	20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
15	4D	24/20	15.00 - 17.00	19/21/21/50	42	64																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
20								306.4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Remarks:																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Stratification lines represent approximate boundaries between soil types; transitions may be gradual.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Page 1 of 1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Boring No.: HB-LEB-102																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

Work Number: 26288.00

PI = Plasticity Index as determined by AASHTO 90-96 and/or ASTM D4318-98

Maine Department of Transportation Grain Size Distribution Curve



UNIFIED CLASSIFICATION

	Boring/Sample No.	Station	Offset, ft	Depth, ft	Description	WC, %	LL	PL	PI
○	HB-LEB-101/1D	200+50.1	0.9 RT	0.5-2.0	Silty SAND, trace gravel.	23.3			
◆	HB-LEB-101/2D	200+50.1	0.9 RT	5.0-7.0	SILT, some sand, trace gravel.	12.4			
■	HB-LEB-102/1D	201+98.9	1.6 RT	0.4-2.0	SAND, some silt, little gravel.	7.5			
●	HB-LEB-102/4D	201+98.9	1.6 RT	15.0-17.0	Sandy SILT, trace gravel.	16.7			
▲									
X									

WIN
026288.00
Town
Lebanon
Reported by/Date
WHITE, TERRY A 1/30/2024