

June 10, 2025

Subject:

Mr. Colton Leyendecker CJL CONSTRUCTION LLC P.O. Box 339 Holt, Florida 32564

Summary Letter of Findings

GARRETT MILL ROAD ASPHALT INVESTIGATION

Baker, Okaloosa County, Florida

NOVA Project Number 10116-2025152

Dear Mr. Leyendecker:

**NOVA Engineering and Environmental LLC (NOVA)**, at your request, has completed the geotechnical investigation of the existing roadway in Baker, Florida. Our exploration at the project site included performing three asphalt cores with subsequent 5-foot-deep auger borings within the subject road alignment.

Exhibit 2

Exhibit 2

#### Core/Boring C-1

Beneath approximately 6 inches of asphalt and 9 inches of sand/clay base, the test boring generally encountered slightly silty fine sands (USCS classification of SP-SM) to the maximum depth explored of about 5 feet below existing grade (BEG).

#### Core/Boring C-2

Beneath approximately 2 inches of asphalt, 9 inches of lime rock base, and  $1\frac{1}{2}$  feet of sand/clay base, the test boring generally encountered silty fine sands (SM) to the maximum depth explored of about 5 feet BEG.

#### Core/Boring C-3

Beneath approximately 4 inches of asphalt, and 9 inches of sand/clay base, the test boring generally encountered slightly silty fine sands (SP-SM) to the maximum depth explored of about 5 feet BEG.

Groundwater was not encountered within the test borings at the time of our field exploration, which occurred during a period of relatively normal seasonal rainfall.

The Test Boring Records as well as a Boring Location Plan are provided in the attached Appendix.

Based on comparisons of current annual monthly rainfall data to historical rainfall data extending back 50+ years in time, we estimate that the normal permanent seasonal high groundwater (SHGW) table for this site will remain at a depth greater than the maximum depth explored of about 5 feet BEG at boring locations at the time of drilling, as shown in the table below.

We appreciate your selection of NOVA and the opportunity to be of service on this project. If you have any questions, or if we may be of further assistance, please do not hesitate to contact us.

Sincerely,

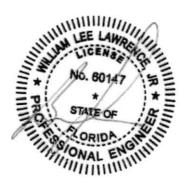
NOVA Engineering and Environmental LLC

Eric L. H. Sharpe Staff Engineer

Attachments: Site Location Map

Boring Location Plan Key to Boring Logs Test Boring Record (3)

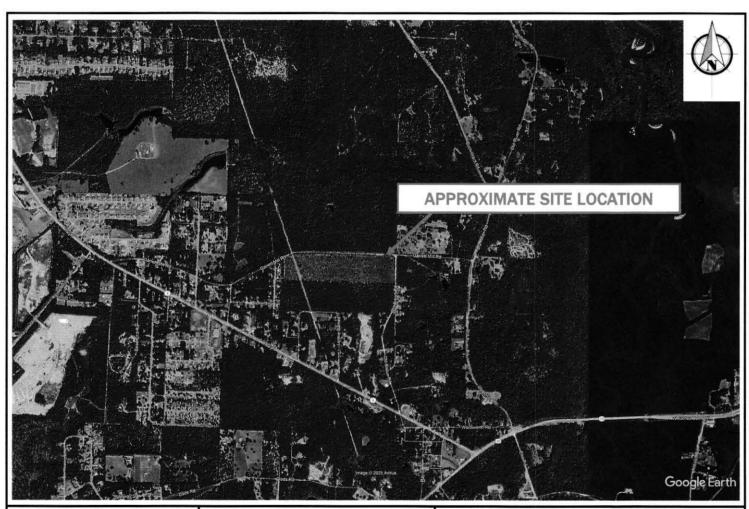
Summary Photo Essay



William L. Lawrence, P.E. Senior Regional Engineer Florida P.E. No. 60147



# APPENDIX A Figures and Maps



Scale: Not To Scale

Date Drawn: June 10, 2025

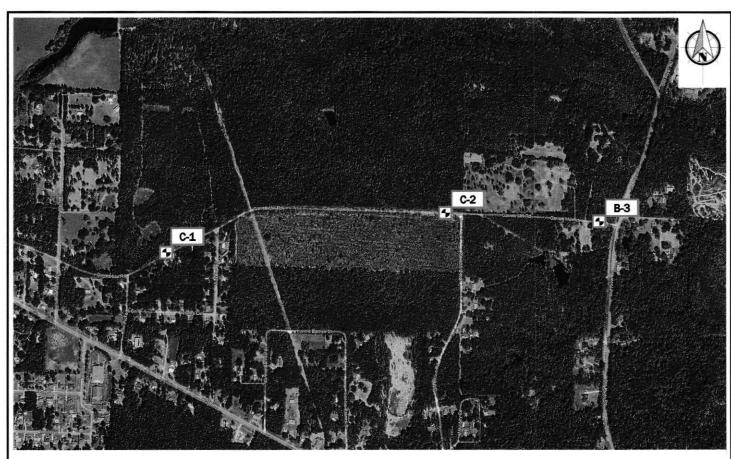
Drawn By: E. Sharpe

Checked By: W. Lawrence



5001 Commerce Park Circle Pensacola, Florida 32505 850.607.7782 ♦ 850.249.6683 PROJECT LOCATION MAP
Garrett Mill Road Asphalt Investigation
Baker, Okaloosa County, Florida
NOVA Project Number 10116-2025152

# APPENDIX B Subsurface Data



#### **LEGEND**

C-x = Core w/5-ft Hand Auger

Scale: Not To Scale
Date Drawn: June 10, 2025
Drawn By: E. Sharpe
Checked By: W. Lawrence



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### BORING LOCATION PLAN Garrett Mill Road Asphalt Investigation

Baker, Okaloosa County, Florida NOVA Project Number 10116-2025152



### **KEY TO BORING LOGS**

#### SYMBOLS AND ABBREVIATIONS

O IMPOES AND ADDICEVIATIONS								
SYMBOL	DESCRIPTION							
N-Value	No. of Blows of a 140-lb. Weight Falling 30 Inches Required to Drive a Standard Spoon 1 Foot							
WOR	Weight of Drill Rods							
мон	Weight of Drill Rods and Hammer							
<u> </u>	Sample from Auger Cuttings							
7	Standard Penetration Test Sample							
	Thin-wall Shelby Tube Sample (Undisturbed Sampler Used)							
% REC	Percent Core Recovery from Rock Core Drilling							
RQD	Rock Quality Designation							
$oldsymbol{ abla}$	Stabilized Groundwater Level							
$\subseteq$	Seasonal High Groundwater Level (also referred to as the W.S.W.T.)							
NE	Not Encountered							
GNE	Groundwater Not Encountered							
BT	Boring Terminated							
-200 (%)	Fines Content or % Passing No. 200 Sieve							
MC (%)	Moisture Content							
LL	Liquid Limit (Atterberg Limits Test)							
PI	Plasticity Index (Atterberg Limits Test)							
К	Coefficient of Permeability							
Org. Cont.	Organic Content							
G.S. Elevation	Ground Surface Elevation							

#### UNIFIED SOIL CLASSIFICATION SYSTEM

	MAJOR DIVIS	SIONS	GROUP SYMBOLS	TYPICAL NAMES
*e*	GRAVELS	CLEAN	GW	Well-graded gravels and gravel sand m∝tures, little or no fines
200 siev	50% or more of coarse	GRAVELS	GP	Poorly graded gravels and gravel-sand mixtures, little or no fines
FINE-GRAINED SOILS COARSE-GRAINED SOILS 50% or more passes the No. 200 sieve* More than 50% retained on the the No. 200 sieve*	fraction retained on	GRAVELS	GM	Silty gravels and gravel-sand- silt mortures
	No. 4 sieve	WITH FINES	GC	Clayey gravels and gravel- sand-day mixtures
SE-GR	SANDS	CLEAN SANDS 5% or less	SW**	Well-graded sands and gravell sands, little or no fines
COAR 50% re	More than 50% of coarse	passing No. 200 sieve	SP**	Poorly graded sands and gravelly sands, little or no fines
re than	fraction passes No.	SANDS with 12% or more	SM**	Silty sands, sand-silt mixtures
Mo	4 sieve	passing No. 200 sieve	SC**	Clayey sands, sand-clay mixtures
	SILTS AND CLAYS Liquid limit 50% or less		ML	Inorganic sits, very fine sands rock flour, sity or clayey fine sands
) sieve*			CL	inorganic clays of low to medium plasticity, gravelly clays, sandy clays, lean clays
SOILS No. 200			OL	Organic silts and organic silty clays of low plasticity
GRAINED lasses the			МН	Inorganic silts, micaceous or diamicaceous fine sands or silts, elastic silts
FINE-	Liqu	ND CLAYS	СН	Inorganic clays or clays of high plasticity, fat clays
20%	greater	than 50%	ОН	Organic clays of medium to high plasticity
			PT	Peat, muck and other highly organic soils

\*Based on the material passing the 3-inch (75 mm) sieve
\*\* Use dual symbol (such as SP-SM and SP-SC) for soils with more
than 5% but less than 12% passing the No. 200 sieve

#### RELATIVE DENSITY

(Sands and Gravels)
Very loose – Less than 4 Blow/Foot
Loose – 4 to 10 Blows/Foot
Medium Dense – 11 to 30 Blows/Foot
Dense – 31 to 50 Blows/Foot
Very Dense – More than 50 Blows/Foot

#### CONSISTENCY

(Silts and Clays)

Very Soft – Less than 2 Blows/Foot

Soft – 2 to 4 Blows/Foot

Medium Stiff – 5 to 8 Blows/Foot

Stiff – 9 to 15 Blows/Foot

Very Stiff – 16 to 30 Blows/Foot

Hard – More than 30 Blows/Foot

#### RELATIVE HARDNESS

(Limestone)
Soft - 100 Blows for more than 2 Inches
Hard - 100 Blows for less than 2 Inches

#### **MODIFIERS**

These modifiers Provide Our Estimate of the Amount of Minor Constituents (Silt or Clay Size Particles) in the Soil Sample

Trace – 5% or less
With Silt or With Clay – 6% to 11%
Silty or Clayey – 12% to 30%
Very Silty or Very Clayey – 31% to 50%

These Modifiers Provide Our Estimate of the Amount of Organic Components in the Soil Sample

Trace – Less than 3%
Few – 3% to 4%
Some – 5% to 8%
Many – Greater than 8%

These Modifiers Provide Our Estimate of the Amount of Other Components (Shell, Gravel, Etc.) in the Soil Sample

Trace - 5% or less Few - 6% to 12% Some - 13% to 30% Many - 31% to 50%

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## APPENDIX C Laboratory Data

### **SUMMARY OF CLASSIFICATION & INDEX TESTING**

#### Garrett Mill Road Asphalt Investigation

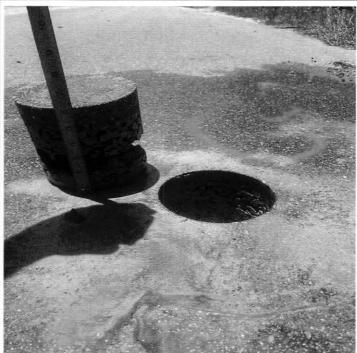
Baker, Okaloosa County, Florida NOVA Project Number 10116-2025152

SUMMARY OF CLASSIFICATION AND INDEX TESTING										
Boring No.	Sample Depth (ft. BEG)	Natural Moisture (%)	Percent Fines (%- #200)	USCS Soil Classification						
C-1	15"- 5'	4	12	SP-SM						
C-2	11"- 2.5'	7	18	SM						
C-2	2.5'- 5'	8	15	SM						



# APPENDIX D Pavement Evaluation





#### PHOTO 1

Location of C-1 coring/boring location on the north side of the Garrett Mill Road between the west and east entrances to Pickens Circle.

#### **PHOTO 2**

Core of C-1 was observed to be on the order of 6 inches in depth, with about 9 inches of sand/clay base.

Scale: Not to Scale	
Date Taken: June 9, 2025	
Taken by: E. Sharpe	
Checked by: W. Lawrence	



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Garrett Mill Road Asphalt Evaluation
Baker, Okaloosa County, Florida
NOVA Project Number 10116-2025152

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#### **РНОТО 3**

The photo depicts the location of core/boring C-2 on Garrett Mill Road roughly 200 feet west from the intersection with Old Brown Road.

#### PHOTO 4

Core of C-2 was observed to be on the order of 2 inches of asphalt, roughly 9 inches of lime rock base, and  $1\frac{1}{2}$  feet of sand/clay base.



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Garrett Mill Road Asphalt Evaluation
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#### **PHOTO 5**

The photo depicts the location of core/boring C-3 on Garrett Mill Road roughly 200 feet west from the intersection with Old River Road.

#### РНОТО 6

Core of C-3 was observed to be on the order of 4 inches of asphalt, and 9 inches of sand/clay base.

Scale: Not to Scale	
Date Taken: June 9, 2025	_
Taken by: E. Sharpe	
Checked by: W. Lawrence	



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