<b>ECS Florida, LLC</b> 2330 South Nova Road, Suite A South Daytona, FL 32119 3869449588 3869449589	LETTER OF TRANSMITTAL						
August 23, 2022	RE: LaMer - Wall						
Spec Contractor Services, LLC	ECS Job # 56:1622						
PO Box 2249 Winter Park, FL 32790	Permits:						
ATTN: Ray Reynolds	Location: 3255 S. Atlantic Avenue Daytona Beach Shores, FL 32118						
We are X Field Reports X enclosing:	For your use <b>X</b> As requested						
CC: Spec Contractor Services, LLC - Greg Bruce							
ENCL: Field Report # 1 8/19/2022 3255 S. At	tlantic Avenue						
No 93191 3/9/22 STATE OF Maximilian, Remoitz, P.E.	Victor Faltas, P.E. Office Manager						

Disclaimer

Geotechnical Department Manager

<sup>1.</sup> This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.

<sup>2.</sup> The information in this report relates only to the activities performed on the report date.

<sup>3.</sup> Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.

<sup>4.</sup> Incomplete or non-conforming work will be reported for future resolution.

<sup>5.</sup> The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.

ECs	ECS Florida, LLC 2330 South Nova Road, Suite A South Daytona, FL 32119 (386) 944-9588 [Phone] (386) 944-9589 [Fax]		Project No. Report No.	<b>REPORT</b> 56:1622 1		
Project	LaMer - Wall		Day & Date Weather	Friday 8/19/2022 °/		
Location	Daytona Beach Shores, FL		On-Site Time	0.00		
Client	Spec Contractor Services, LLC	Lab Time Travel Time*	0.00			
Contractor	None Listed		Total	<u>0.00</u> 0.00		
			Re Obs Time	0.00		
Remarks	3255 S. Atlantic Avenue					
Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure	
Chargeable Ite	ms			1:00A	1:00A	

\* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

Address: 3255 South Atlantic Avenue, Daytona Beach Shores, Florida 32118

## PROJECT UNDERSTANDING

We understand that a geotechnical exploration is needed for a previously distressed wall at the La Mer Condominium site, at 3255 South Atlantic Avenue in Daytona Beach, Florida. Based on photographs provided, the wall distress consisted of tilting (rotation) and separation of an approximate 8 feet tall and 35 feet long section of non-load bearing wall located at the site; specifically at the southwest corner of the existing high-rise building. The distress did not appear to be a result of significant footing settlement. We understand that the wall is attached to the main building and is resting on the main building footing or pile cap, but is not supporting the existing structure. The wall was replaced prior to our exploration. We understand that loading on the existing footing or pile cap from the wall consists merely of the wall weight itself.

The purpose of the geotechnical exploration was to assess the classification and condition of the soils adjacent to the existing building footing for organic materials or other conditions that could be adverse to the performance of the footing beneath the wall. It should be understood that this was a limited evaluation specifically addressing the proposed wall repair and not assessing the performance of the existing building foundation.

### FIELD EXPLORATION

An ECS representative performed field explorations (borings) on August 15, 2022 for the subject site. The approximate boring locations are indicated on the attached Boring Location Diagram. We located and performed one (1) auger boring and two (2) auger borings with Dynamic Cone Penetration (DCP) tests. Boreholes were drilled to depths of approximately 6 feet below the existing ground surface and DCP tests were undertaken to approximately 5.5 feet below the ground surface. The auger drilling was performed in general accordance with the methodology outlined in ASTM D1452 Standard Practice for Soil Exploration and Sampling by Auger Borings, to further explore the subsurface conditions within the area of the

proposed structure. The approximate locations of the borings are shown on the attached Boring Location Diagram.

Representative soil samples recovered from the borings were returned to our laboratory for further evaluation. The subsurface soils were visually classified by a geotechnical engineer based on texture and plasticity in general accordance with ASTM D2487 Standard Practice for Classification for Engineering Purposes (Unified Soil Classification System (USCS)), and ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedures), including USCS classification symbols. The USCS soil classification and symbols are presented on the attached Hand Auger Logs.

Groundwater was encountered at each boring location and recorded at the time of drilling, at approximately 5 feet below the ground surface. We estimate the normal seasonal high groundwater level at the site to be approximately 2 feet above the water level at the time of drilling. We note that groundwater levels will fluctuate due to seasonal climatic variations, surface water runoff patterns, construction operations, and other interrelated factors. It is possible that groundwater levels may exceed the estimated normal seasonal high groundwater level as a result of significant or prolonged rains.

## WALL REPAIR AND FOOTING RECOMMENDATIONS

It is our opinion that the existing soil conditions at the site are able to support the existing non-load bearing wall as repaired, assuming that the wall is established on a proper footing, at least 18 inches wide and 18 inches deep. It is our understanding that there has not been indication of any settlement of the main building or wall, and the distress observed appeared primarily as wall rotation away from the face of the existing structure (i.e. more of a cosmetic distress). It is expected that loading from the wall repair would result in a footing bearing pressure of less than 1,500 pounds per square foot (psf), which has already been imposed on the soil since the time of the original wall construction. Based on this loading and the soil conditions encountered in the soil borings, for lightly loaded structures such as the existing non-load-bearing wall, we expect that the estimated maximum total settlement would not exceed 1 inch, and the estimated maximum differential settlement should not exceed ½ inch over 50 feet. It is expected that this settlement would occur early in the life of the wall and footing system, and due to the age of the development, we would not expect significant additional settlements to occur.

It is recommended that good drainage be maintained to direct stormwater runoff away from the building and footing. If the previous wall distress reappears, ECS should be notified to provide additional recommendations regarding the wall.



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# FIELD EXPLORATION PROCEDURES

### **Dynamic Cone Penetrometer**

The Dynamic Cone Penetrometer (DCP) test was performed using a hand operated portable dynamic cone penetrometer. The penetrometer test consists of a 15 pound steel mass falling 20 inches to strike an anvil causing penetration of a 1.5 inch diameter 45 degree cone seated at the bottom of a hand augered boring. The cone point is initially seated 2 inches at the bottom of the auger. Then the cone point is further driven 1 <sup>3</sup>/<sub>4</sub> inches with these blows counted and recorded. The instrument has been used extensively in the southeast (including the coastal plain region) and has been correlated with Standard Penetration Test (SPT) results. Refer to the document by George F. Sowers and Charles S. Hedges, *Dynamic Cone for Shallow In-Situ Penetration, Vane Shear and Cone Penetrations Resistance Testing of In-Situ Soils*, ASTM STP 399, American Society of Testing and Materials, 1966, pg. 29 for a discussion for the theoretical principle of the DCP test.

#### **Auger Boring**

The auger borings were performed manually by the use of a hand auger and in general accordance with the latest revision of ASTM D 1452, "Soil Investigation and Sampling by Auger Borings". Representative samples of the soils brought to the ground surface by the augering process were placed in sealed containers and transported to our laboratory where they were examined by our engineer to verify the driller's field classification.

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CLIENT: Spec Contractor Services, LLC					PROJECT NO.: 56:1622			BORING	NO.:	SHEET: 1 of 1				
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La Mer							ECS					1		~
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