

March 26, 2024

Investments Robles, LLC

1302 Cupples Road San Antonio, Texas 78255

Attn: Mr. Joe Luis Gonzalez

RE: SUPPLEMENTAL GEOTECHNICAL ENGINEERING RECOMMENDATIONS
PROPOSED PLEASANTON TOWNE SQUARE
11255 PLEASANTON ROAD
SAN ANTONIO, TEXAS
PSI PROJECT NO. 0312-2347-1

Dear Mr. Gonzalez:

Professional Service Industries, Inc. (PSI) is pleased to submit these supplemental pavement design recommendations for the proposed Pleasanton Towne Square project. These recommendations were requested by Mr. José Arturo Niño, M.B.A., representing Urban Capital Strategies. These recommendations are provided under the terms and conditions of PSI Proposal No.: 0311-379509-R2, dated August 3, 2022.

The following recommendations for a pavement section meeting the requirements for a City of San Antonio (COSA) Local Type B were developed based upon the information obtained from the soil borings and laboratory testing under PSI Project No: 0312-2347.

PAVEMENT DESIGN PARAMETERS AND ASSUMPTIONS (FLEXIBLE)

COSA Local Type B		
Minimum Acceptable ESAL Value	2,000,000	
Reliability, percent	90	
Initial Serviceability Index, Flexible Pavement	4.2	
Terminal Serviceability Index	2.5	
Design Traffic Loading, Flexible Pavement	2,000,000 ESALs	
Standard Deviation, Flexible Pavement	0.45	
Subgrade California Bearing Ratio (CBR)	5.5	

FLEXIBLE PAVEMENT SECTION OPTIONS COSA LOCAL TYPE B

Material	Option 1	Option 2
Traffic Volume	2,000,000 ESALs	
Hot Mix Asphaltic Concrete Surface	3 inches	1½ inches
Hot Mix Asphaltic Concrete Base		4 inches
Flexible Base	18 inches	12 inches
Lime Treated Subgrade	8 inches	8 inches
Compacted Subgrade	_	

PAVEMENT DESIGN AND CONSTRUCTION RECOMMENDATIONS

Minimum Undercut Depth	6 inches or as needed to remove roots
Reuse Excavated Soils	Free of roots and debris and meet material requirements of intended use
Undercut Extent	2 feet beyond the paving limits
Exposed Subgrade Treatment	Proof-roll with rubber-tired vehicle weighing at least 20 tons. A representative of the Geotechnical Engineer should be present during proof-roll.
Proof-Rolled Pumping and Rutting Areas	Excavate to firmer materials and replace with compacted general or select fill under direction of a representative of the Geotechnical Engineer
General Fill	Materials free of roots, debris, and other deleterious materials with a maximum rock size of 4 inches with a CBR greater than 3
Minimum General Fill Thickness	As required to achieve grade
Maximum General Fill Loose Lift Thickness	9 inches
Lime Treated Subgrade	Performed in general accordance with TxDOT Item 260. Subgrade stabilized with lime should achieve a pH of 12.4 or greater. (Estimate 6% by dry weight). A lime series test should be performed at the time of construction to determine the lime requirement.
Flexible Base	TxDOT Item 247, Type A, Grade 1-2
Maximum Flexible Base Loose Lift Thickness	9 Inches
Hot Mix Asphaltic Concrete Surface	COSA Item 205
Hot Mix Asphaltic Concrete Base	COSA Item 206



CLOSING

The recommendations presented in this Supplemental are based on the available subsurface information obtained by PSI and design details furnished by the Client and Design Team. Recommendations presented in PSI's referenced geotechnical reports not modified by this letter remain applicable. If there are any revisions to the plans for this project, or if deviations from the subsurface conditions noted in the original report are encountered during construction, PSI should be notified immediately to determine if changes in the pavement recommendations are required. If PSI is not notified of such changes, PSI will not be responsible for the impact of those changes on the project.

The geotechnical engineer warrants that the findings, recommendations, or professional advice contained herein have been made in accordance with generally accepted professional geotechnical engineering practices in the local area. No other warranties are implied or expressed.

We appreciate the opportunity to provide Geotechnical Consulting Engineering services to you and your design team. If you have any questions regarding the information presented in this letter, please contact our office.

Respectfully submitted,

Professional Service Industries, Inc.

S. Peter Gonzales, P.E. Department Manager Geotechnical Services Philip L. Johnson, P.E.

Senior Geotechnical Engineer

Principal Consultant