Somat Engineering, INCORPORATED

November 15, 2024
2024105A

Mr. Travis Cysewski, P.E.
Kimley-Horn Associates, Inc.
111 West Jackson Boulevard, Suite 1320
Chicago, Illinois 60604

RE: Draft Pavement Investigation Data Letter Report
Property Redevelopment
Coleman A. Young International Airport
Detroit, Michigan

Dear Mr. Cysewski:

At your request, we have performed a field investigation at the Coleman A. Young International Airport located at 11499 Conner Street in Detroit, Michigan. This investigation was performed in accordance with Somat Proposal No. P240160A, dated July 1, 2024.

As we understand, the airport is planning to prepare about 60 acres of land at the southeast end of the airport for sale and subsequent redevelopment. This project mainly involves demolition of existing pavement including a portion of Runway 7-25, various taxiways, hanger taxilanes, and service roads.

The coring operations were performed on October 7, 2024. At each location, the pavement was cored using a 4-inch diameter portable core barrel. The field exploration program consisted of performing a total of twelve (12) pavement cores within a portion of Runway 7-25, various taxiways, hanger taxilanes, and service roads.

The pavement core locations were requested by Kimley-Horn at specific areas to verify the thickness and condition of the existing pavement for planning demolition. Upon completion of each core, a layer of quick-set cement mix was poured into the hole, the core placed back in, and another layer of cement mix added to patch the surface. The soils underneath the pavement cores were not sampled or tested.

A diagram showing approximate locations of the cores is presented in Appendix A. Table 1 included in Appendix B presents a summary of the coordinates, pavement type, condition, and thickness at each pavement core location. Pavement core photographs are presented in Appendix C.

The surveying information (Northing, Easting, and ground surface elevation) provided by the Project Surveyor are included in Table 1 in Appendix B.

It was a pleasure working with you on this project. Upon your review, should you have any questions or require additional information, please do not hesitate to call us at (313) 963-2721.

Sincerely,

Somat Engineering, Inc.

Jennifer S. Schmitzer
Geotechnical Services Manager

Jane M. Abadir, PE, LEED AP
Principal Engineer, Geotechnical Services

RC/JSS/JA

Attachments:

Appendix A: Pavement Core Location Diagram
Appendix B: Summary Table 1 for Pavement Information
Appendix C: Pavement Core Photographs

APPENDIX A

SOIL BORING LOCATION DIAGRAM

Adapted from Google Earth Satellite Imagery

Drawing Scale as Noted

Somat Engineering, Inc.
3031 West Grand Boulevard,
Suite 228 Detroit, MI 48202
Phone: (313) 963-2721

Pavement Core Location Diagram

Property Redevelopment Coleman A.
Young International Airport
Detroit, Michigan

LEGEND: Pavement core - ☐

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Pavement Core Location Diagram

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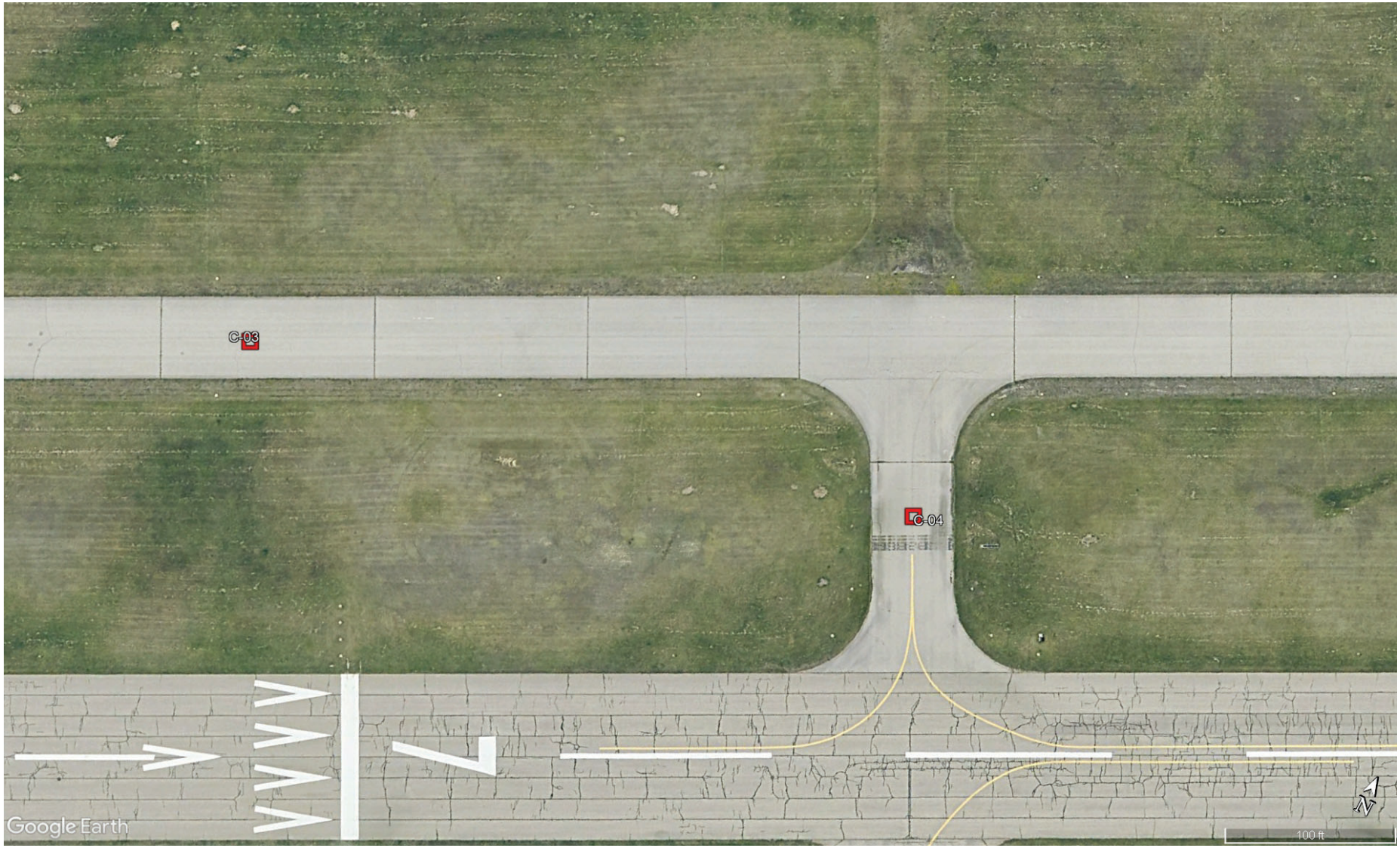

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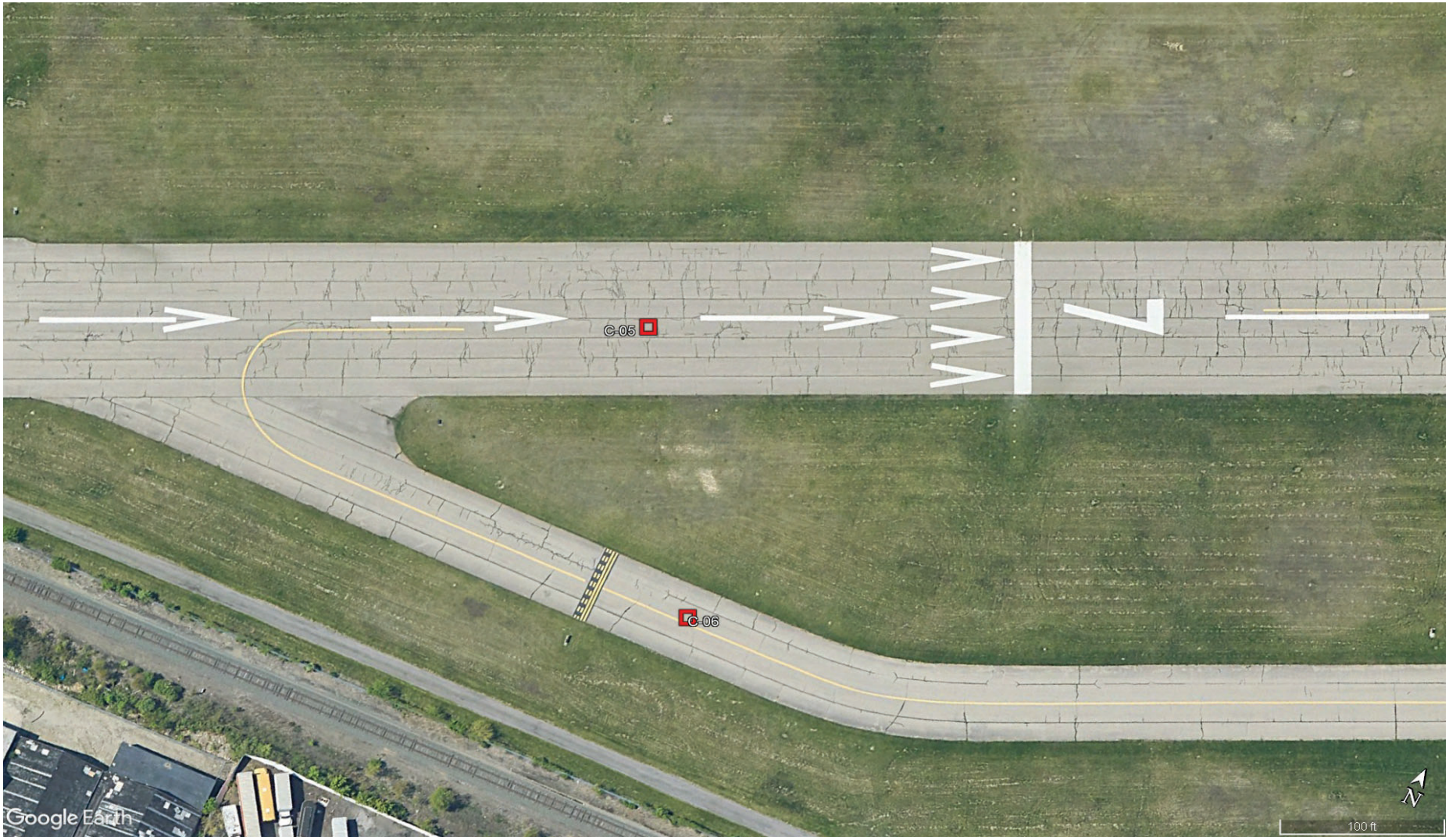

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APPENDIX B

TABLE 1: SUMMARY OF PAVEMENT CORE INFORMATION

Table 1: Summary Table of Pavement Core Information

Pavement Core ID	General Core Location	Northing (Feet)	Easting (Feet)	Ground Surface Elevations (Feet)	Pavement Type and Thickness
C-01	Old taxiway near fire station	333191.53	13489495.42	624.20	6 inches of mixed gravel, asphalt millings, and soil over 6 to 8 inches of deteriorated PCC*
C-02	Run-up pad	332334.62	13488147.51	625.12	4 inches of ACC
C-03	Taxiway	332493.06	13488687.98	625.61	6 inches of ACC
C-04	Taxiway connector	332578.80	13489080.06	624.53	5.5 inches of ACC
C-05	Runway 7/25	332189.16	13488655.34	625.62	10 inches of ACC (lower 5 inches deteriorated)
C-06	Taxiway	332033.12	13488764.86	625.68	9.5 inches of ACC (lower 6 inches deteriorated)
C-07	Taxiway connector	332331.49	13489201.91	624.82	7 inches of ACC
C-08	Taxilane at hangars	332100.63	13489249.37	623.79	2 inches of ACC
C-09	Apron	332393.03	13489995.65	624.57	9.5 inches of PCC
C-10	Apron (cul-de-sac)	332189.08	13490229.78	625.73	7.5 inches of ACC (lower 2 inches deteriorated. Upper 3.75 inches appear to be different mix)
C-11	Perimeter Road	332063.41	13487806.22	626.72	3 inches of ACC
C-12	Deteriorated pavement adjacent to taxiway	332634.65	13489703.59	624.19	3.25 inches of ACC over 6.5 inches of PCC- Total 9.75 inches

ACC - Asphaltic Cement Concrete
PCC - Portland Cement Concrete
The surveying data was provided by the Project Surveyor (Seiber Keast Lehner Inc.). The horizontal datum and vertical datum are based on NAD83 Michigan State Planes, South Zone; and GPS derived NAVD88, respectively.

* At C-01 location, the upper 6 inches were found to consist of mixed fill material consisting of gravel, asphalt millings and soil with grass growing at the surface. Below the fill, Portland cement concrete was encountered but was completely deteriorated and not able to be cored. A hammer drill was used to determine the thickness of pavement, which was estimated to be about 6 to 8 inches. Based on satellite images, it appears this location is in a previously decommissioned taxiway.

APPENDIX C

PAVEMENT CORE PHOTOGRAPHS

C-01
6 inches of mixed fill (asphalt millings, gravel, soil) over 6 to 8 inches of Portland cement concrete

C-02
4 inches of Asphaltic Cement Concrete

C-03
6 inches of Asphaltic Cement Concrete

C-04
5.5 inches of Asphaltic Cement Concrete

C-05
10 inches of Asphaltic Cement Concrete
(lower 5 inches deteriorated)

C-06
9.5 inches of Asphaltic Cement Concrete
(lower 6 inches deteriorated)

C-07
7 inches of Asphaltic Cement Concrete

C-08
2 inches of Asphaltic Cement Concrete

C-09
9.5 inches of Portland Cement Concrete

C-10
7.5 inches of Asphaltic Cement Concrete (Lower 2 inches deteriorated. Upper 3.75 inches appear to be different mix)

C-11
3 inches of Asphaltic Cement Concrete

C-12
3.25 inches of Asphaltic Cement Concrete over
6.5 inches of Portland Cement Concrete