Appendix I – Modifications of Standards at SGH

From:	Seth Timmerman
To:	Snyder, Chris; Strack, Paul; Muia, Maria; Tom Franzen
Subject:	Fwd: SGH Proposed MOS for Runway 15/33 OFA
Date:	Friday, January 31, 2020 3:41:57 PM

Check it out!!!

Seth Timmerman

SGH Airport Manager
Office #: (937) 325-6108 | Cell #: (937) 215-5532
Email: **stimmerman@springfieldohio.gov**

https://springfieldohio.gov/

---------- Forwarded message ---------
From: **Delaney, Katherine S (FAA)** <Katherine.S.Delaney@faa.gov>
Date: Fri, Jan 31, 2020 at 3:38 PM
Subject: SGH Proposed MOS for Runway 15/33 OFA
To: Seth Timmerman <stimmerman@springfieldohio.gov>
Cc: Erskine, Alex (FAA) <Alex.Erskine@faa.gov>

Seth,

We have received some additional guidance regarding the proposed MOS for the Runway 15/33 OFA. Based on the draft ALP Sheet 4 you sent to Alex via email on 1/31/2020, there is a proposed fix to move the road outside of the OFA. Based on the airport proposing a fix to remove the road from the OFA, the FAA will not need to continuing processing the MOS. I will be able to terminate the MOS once SGH submits the updated Airport Layout Plan for review and airspace. This approach cannot be followed if the ALP, when submitted, does not include the future road relocation.

I will be in training next week. Please let me know if you have any questions and if you would like to schedule a follow up phone call. Also, do you have a timeframe for submitting the Master Plan and ALP to the ADO for review?

Thanks and have a good weekend,

Katy

Katherine S. Delaney

Community Planner

Federal Aviation Administration

Detroit Airports District Office

P 734-229-2958

1. Standard/Requirement:

The Runway Object Free Area (ROFA) is centered about the runway centerline. The ROFA clearing standard requires clearing the ROFA of above-ground objects protruding above the nearest point of the Runway Safety Area (RSA). Except where precluded by other clearing standards, it is acceptable for objects that need to be located in the ROFA for air navigation or aircraft ground maneuvering purposes to protrude above the nearest point of the RSA, and to taxi and hold aircraft in the ROFA. To the extent practicable, objects in the ROFA should meet the same frangibility requirements as the RSA. Objects non-essential for air navigation or aircraft ground maneuvering purposes must not be placed in the ROFA. On Runway 15-33, the ROFA is 1,000 feet beyond the end of the Runway and 400 feet off center-line.

2. Proposed:

Allow airport security fence and county road to remain within the Runway OFA until the West Jackson Road can be relocated (See *attachment SGH_OFA SQ Ft.pdf* and *attachment Runway 15-33 Exhibit ALT C-5.pdf*).

3. Explain Why Standard Cannot be Met (FAA ORDER 5300.1):

West Jackson Road and the Airport Perimeter Fence (south of Runway 15-33) currently penetrates the Runway OFA by 75 feet and are higher than the nearest point of the Runway RSA. Refer to the Attached Exhibit for details.

4. Discuss Viable Alternatives (FAA ORDER 5300.1):

Alternative C-6 Option 1: Relocate West Jackson Road and Fence outside of ROFA (see *attachment Runway 15-33 Exhibit Alt C-6.pdf* (Option 1): This option relocates West Jackson Road outside the ROFA and requires the road to be shifted south to avoid the southwest corner of the ROFA of the end of Runway 33. The road remains in the RPZ as it does today. This option has the potential to take property from approximately 2 landowners and adds about 800 feet of road.

Alternative C-6 Option 2: Relocate West Jackson Road and Fence outside of ROFA (see *attachment Runway 15-33 Exhibit Alt C-6.pdf* (Option 2): This option reroutes West Jackson Road outside the ROFA and the RPZ. This requires the road to be shifted south and east to avoid the entire RPZ off the end of Runway 33. This option has the potential to take property from approximately 5 landowners and adds about 3500 feet of road.

Alternative C-7: Shift Runway 15-33 75 feet to the north to clear the Runway 33 ROFA (see *attachment Runway 15-33 Exhibit Alt C-7.pdf*. This option requires reconstructing Taxiways J and F and the connector off the south send of Taxiway E (all 75 feet northwest of their present location). It requires adding 65 feet of pavement to the end of Runway 15 and removing 75 feet of pavement from Runway 33. The associated runway and taxiway marking and lighting would also have to be shifted and or removed.

Alternative C-8/: Declared Distance to fix Runway 15 ROFA (see *attachment Runway 15-33 Exhibit Alt C-8.pdf).* This reduces the ASDA and LDA for Runway 15 by 75 feet. It provides a clear ROFA for Runway 33, but not a compatible RPZ. The RPZ for Runway 15 remains incompatible as it is today.

Alternative C-9: Declared Distance to fix Runway 33 ROFA and RPZ (see *attachment Runway 15-33 Exhibit Alt C-9.pdf)* This reduces the TORA, ASDA and LDA for Runway 15 to provide for a clear ROFA and a compatible RPZ for Runway 33. The RPZ for Runway 15 remains incompatible as it is today.

Alternative C-10: Declared Distance to fix Runway 33 ROFA and RPZ and Runway 15 RPZ (see *attachment Runway 15-33 Exhibit Alt C-10.pdf)* This reduces the TORA, ASDA and LDA for Runway 15 to provide for a clear ROFA and a compatible RPZ for Runway 33. It also reduces the LDA for Runway 15 to provide for a compatible RPZ for Runway 15.

5. Explain Why the Modification is Necessary to Conform to Local Laws and Regulations (if Applicable):

NOT APPLICABLE

6. State Why Modification Would Provide Acceptable Level of Safety, Economy, Durability, and Workmanship (FAA ORDER 5300.1):

SGH has two runways: the primary is Runway 6-24 (9,009 X 150) and crosswind Runway 15-33 (5,499 x 100), both of which are designated as C-II runways. The airport currently has less than 1,000 operations annually from Category C aircraft. The heavier loaded aircraft use the primary due to its length. The crosswind runway has a penetration to the C-II ROFA 1,000 length beyond runway end for takeoff on Runway 15. The penetration is from the road and fence that traverse the area on the southwest most tip by 75 ft. This makes the effective length for ROFA in this direction 925 feet. The existing penetration includes only 2,671 SF of the ROFA, or .27% of the total ROFA beyond the runway end for aircraft departing Runway 15. The penetration is on the outermost corner and does not include the RSA. The ROFA meets the requirements for B-II and lower aircraft. There are approximately 10 tracks of land owned by different individuals on West Jackson Jefferson approximately one mile either side of the ROFA penetration, with much of the land being farmed, so the road is not a heavily used arterial, but rather a two-lane local road.

Implementing declared distances may cause confusion among pilots and thus not increase safety.

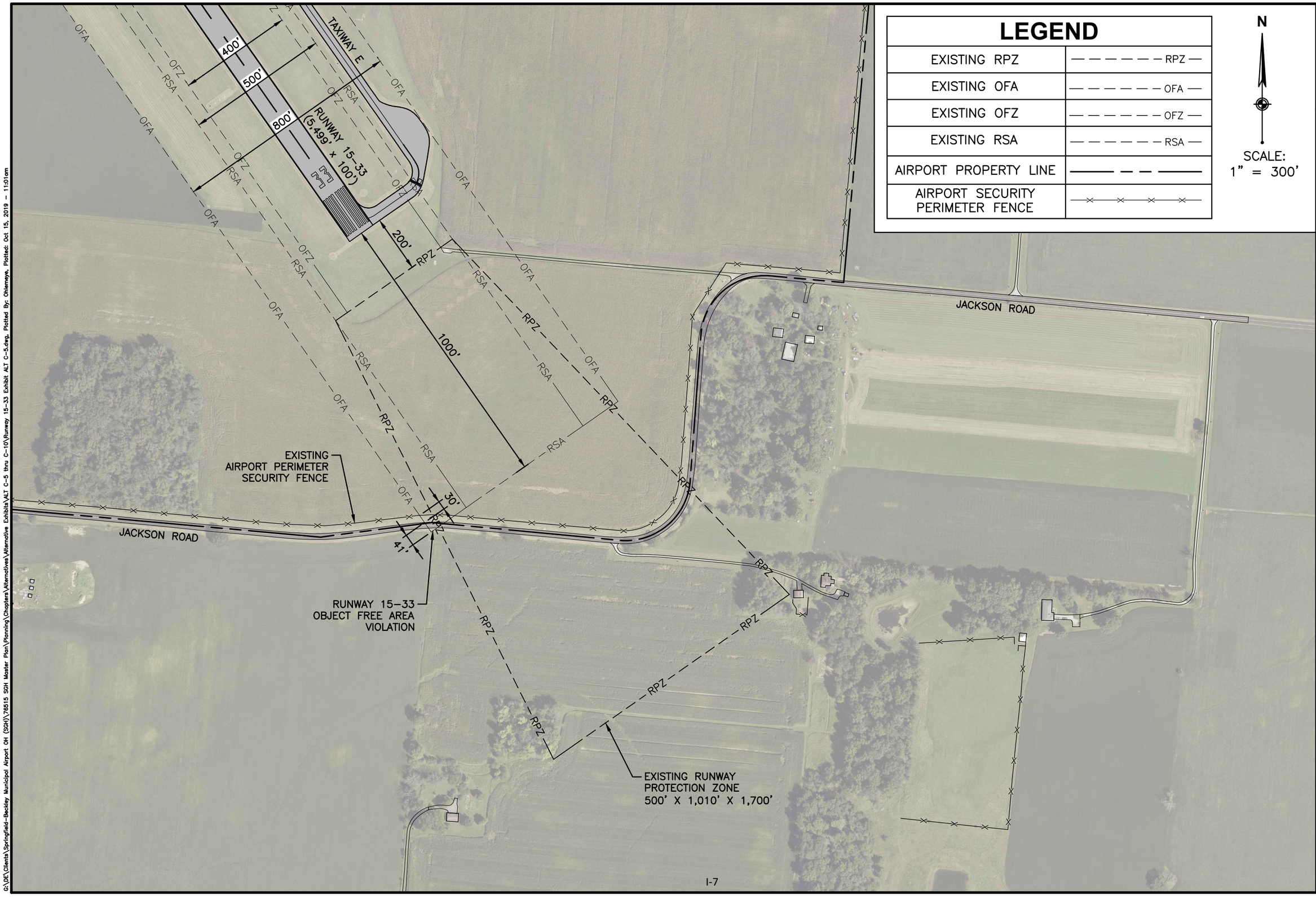
The modification would be in place until the roadway/fence could be located outside the ROFA.

Relocation of the roadway/fence beyond the RPZ would not be feasible. While the road is not heavily used, relocation outside the RPZ would take property from at least five land owners and would remove some existing farm land from use. Much of the land in this area is considered prime farmland by the USDA. It would also increase drive times for these land owners and anyone else traversing the area. The road was relocated to its present location well over 20 years ago, with a slight dog leg that causes the existing penetration. The fence in this location is standard chain-link with three strands of barbed wire. There were no reported accidents associated with the ROFA penetration found in the NTSB Aircraft Accident Database and Synopses.

An exhibit is attached showing the critical aircraft nose wheel at the end of the RSA with the left landing gear on the edge of the RSA. This exhibit shows that the wingtip for the critical aircraft is protected as it will not be within the roadway area.

7. Explain any Special Operational Procedures and/or Restrictions Necessary to Accommodate the Modification of Standards:

NOTAMS should be issued for the proximity of the fence/roadway to the end of Runway 33. Additionally, upon the development of new procedures to the end of RW 33 may require special departure procedures to clear any critical obstacles (due to their proximity).



LEGEND

EXISTING RPZ	— — — — — RPZ —
EXISTING OFA	— — — — — OFA —
EXISTING OFZ	— — — — — OFZ —
EXISTING RSA	— — — — — RSA —
AIRPORT PROPERTY LINE	——— — — ———
AIRPORT SECURITY PERIMETER FENCE	—×—×—×—×—

N

SCALE:
1" = 300'

PROJECT NO.
DATE 10-15-19
DR. TRO
SHT. #

333 North Alabama Street
Suite 200
Indianapolis, IN 46204
317.299.7500
FAX: 317.291.5805

WOOLPERT
ARCHITECTURE | ENGINEERING | GEOSPATIAL

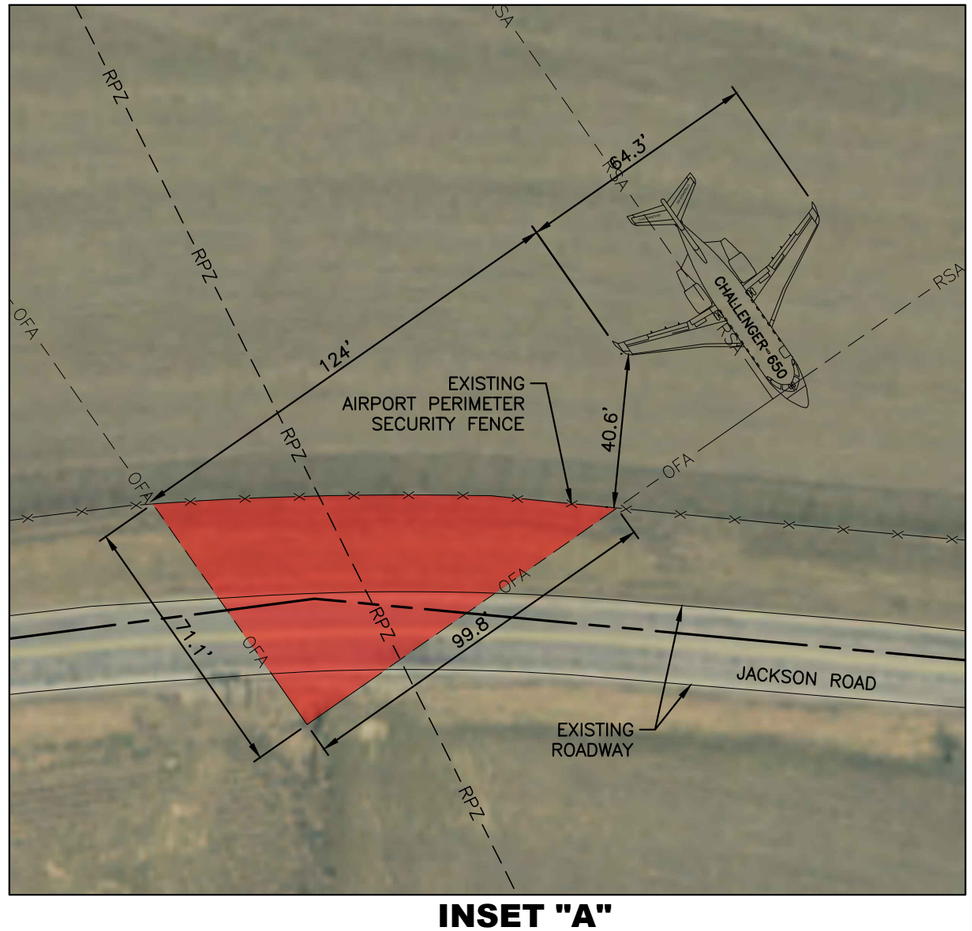
CROSSWIND RUNWAY 15-33 ALTERNATIVES
ALT. C-5 REQUEST FOR MODIFICATION TO STANDARDS
SPRINGFIELD-BECKLEY AIRPORT
SPRINGFIELD, OHIO

LEGEND

EXISTING RPZ	RPZ
EXISTING OFA	OFA
EXISTING OFZ	OFZ
EXISTING RSA	RSA
AIRPORT PROPERTY LINE	
AIRPORT SECURITY PERIMETER FENCE	
RIGHT OF WAY WITHIN OFA	

N

SCALE:
1" = 300'



INSET "A"
(CHALLENGER 650)
SCALE: 1"=40'

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Suite 200
Indianapolis, IN 46204
317.299.7500
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CROSSWIND RUNWAY 15-33 ALTERNATIVES
ALT. C-5 REQUEST FOR MODIFICATION TO STANDARDS
SPRINGFIELD-BECKLEY AIRPORT
SPRINGFIELD, OHIO

LEGEND

EXISTING RPZ	— — — — — — RPZ —
EXISTING OFA	— — — — — — OFA —
EXISTING OFZ	— — — — — — OFZ —
EXISTING RSA	— — — — — — RSA —
AIRPORT PROPERTY LINE	——— — — ———
ROAD RELOCATION **(OPTION 1)**	
ROAD RELOCATION **(OPTION 2)**	

N

SCALE:
1" = 800'

PROJECT NO.
DATE 10-15-19
DR. TRO
SHT. # ____

333 North Alabama Street
Suite 200
Indianapolis, IN 46204
317.299.7500
FAX: 317.291.5805

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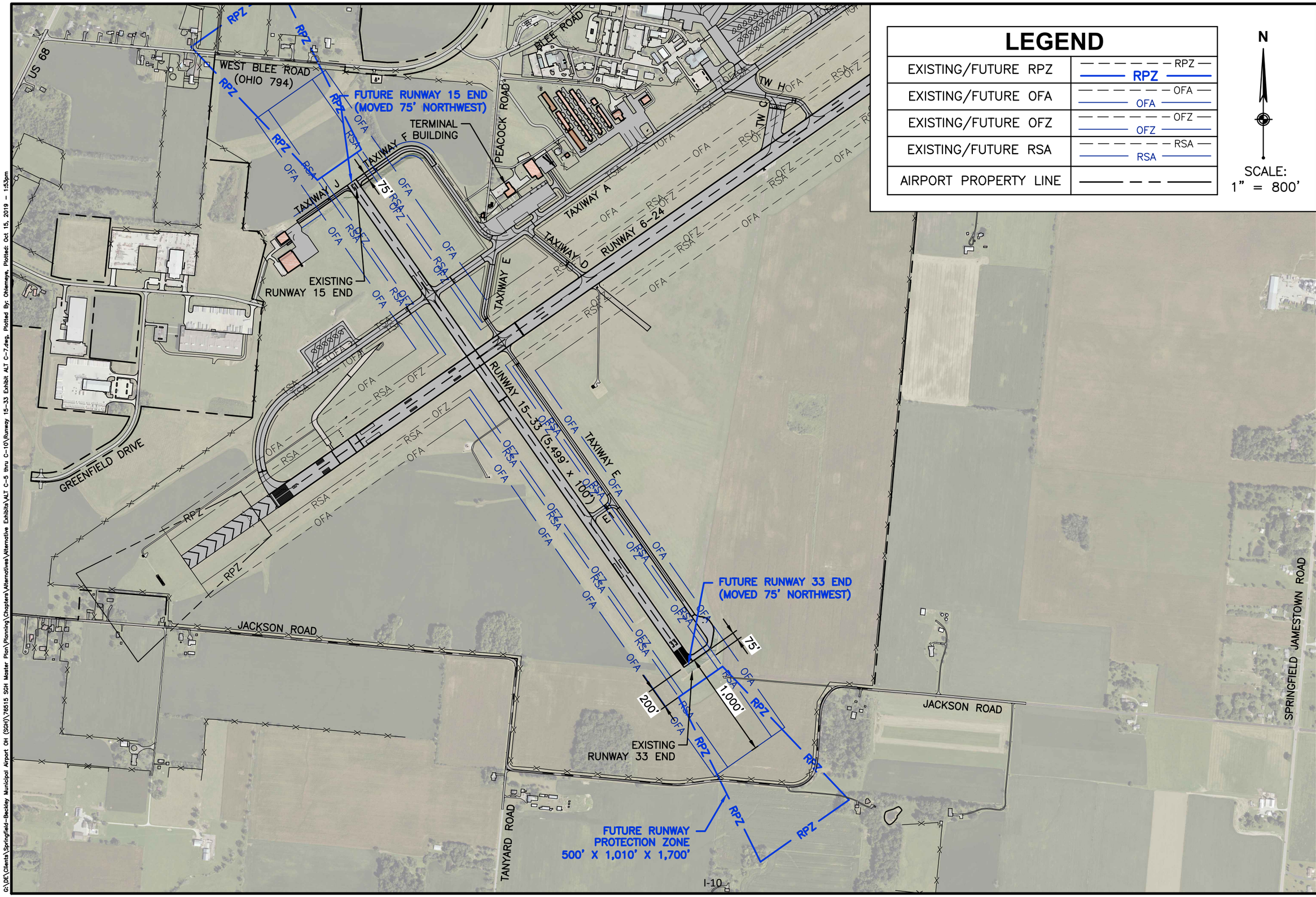
CROSSWIND RUNWAY 15-33 ALTERNATIVES
ALT. C-6 JACKSON ROAD RELOCATION (2 OPTIONS)
SPRINGFIELD-BECKLEY AIRPORT
SPRINGFIELD, OHIO



LEGEND

EXISTING/FUTURE RPZ	RPZ
EXISTING/FUTURE OFA	OFA
EXISTING/FUTURE OFZ	OFZ
EXISTING/FUTURE RSA	RSA
AIRPORT PROPERTY LINE	

N

SCALE: 1" = 800'

PROJECT NO.
DATE 10-15-19
DR. TRO
SHT. #

333 North Alabama Street
Suite 200
Indianapolis, IN 46204
317.299.7500
FAX: 317.291.5805

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CROSSWIND RUNWAY 15-33 ALTERNATIVES
ALT. C-7 SHIFT RUNWAY 75' NORTHWEST
SPRINGFIELD-BECKLEY AIRPORT
SPRINGFIELD, OHIO

G:\DE\Clients\Springfield-Beckley Municipal Airport OH (SGH)\76515 SGH Master Plan\Planning\Chapters\Alternatives\Alternative Exhibits\ALT C-5 thru C-10\Runway 15-33 Exhibit ALT C-7.dwg, Plotted By: Ohlemeye, Plotted: Oct 15, 2019 - 1:53pm

LEGEND

EXISTING RPZ	— — — — — — RPZ —
EXISTING OFA	— — — — — — OFA —
EXISTING OFZ	— — — — — — OFZ —
EXISTING RSA	— — — — — — RSA —
AIRPORT PROPERTY LINE	——— — — ———
AIRPORT SECURITY PERIMETER FENCE	—×—×—×—×—

N

SCALE:
1" = 800'

EXISTING RUNWAY PROTECTION ZONE
500' X 1,010' X 1,700'

TERMINAL BUILDING

PEACOCK ROAD

TAXIWAY A

TAXIWAY C

TAXIWAY D

TAXIWAY E

TAXIWAY F

TAXIWAY J

RUNWAY 6-24

RUNWAY 15-33 (5,499' x 100')

EXISTING RUNWAY PROTECTION ZONE
500' X 1,010' X 1,700'

WEST BLEE ROAD (OHIO 794)

SOUTH YELLOW SPRING STREET (US 68)

JACKSON ROAD

1000'
200'

RPZ
OFA
RSA
OFZ
TOFA

5,499' TORA 15
5,499' TODA 15
5,424' ASDA 15
5,424' LDA 15

REDUCED 75' TO PROVIDE ROFA 1,000' BEYOND EXISTING RUNWAY END

5,499' TORA 33
5,499' TODA 33
5,499' ASDA 33
5,499' LDA 33

RUNWAY DATA	RUNWAY 15-33			
	EXISTING		FUTURE	
	RWY 15	RWY 33	RWY 15	RWY 33
TAKEOFF RUN AVAILABLE (TORA)	5,499'	5,499'	5,499'	5,499'
TAKEOFF DISTANCE AVAILABLE (TODA)	5,499'	5,499'	5,499'	5,499'
ACCELERATE STOP DISTANCE AVAILABLE (ASDA)	5,499'	5,499'	5,424'	5,499'
LANDING DISTANCE AVAILABLE (LDA)	5,499'	5,499'	5,424'	5,499'

PROJECT NO.
DATE 10-15-19
DR. TRO
SHT. #

333 North Alabama Street
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Indianapolis, IN 46204
317.299.7500
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CROSSWIND RUNWAY 15-33 ALTERNATIVES
ALT. C-8 DECLARED DISTANCE TO FIX RW 33 ROFA ONLY
SPRINGFIELD-BECKLEY AIRPORT
SPRINGFIELD, OHIO

LEGEND

EXISTING/FUTURE RPZ	RPZ / RPZ
EXISTING/FUTURE OFA	OFA / OFA
EXISTING/FUTURE OFZ	OFZ / OFZ
EXISTING/FUTURE RSA	RSA / RSA
AIRPORT PROPERTY LINE	
AIRPORT SECURITY PERIMETER FENCE	

N

SCALE:
1" = 800'

EXISTING RUNWAY PROTECTION ZONE
500' X 1,010' X 1,700'

RELOCATED RUNWAY PROTECTION ZONE
500' X 1,010' X 1,700'

1,028'

TERMINAL BUILDING

PEACOCK ROAD

WEST BLEE ROAD (OHIO 794)

SOUTH YELLOW SPRING STREET (US 68)

JACKSON ROAD

TAXIWAY A

TAXIWAY E

TAXIWAY F

TAXIWAY J

TW C

TW D

TW H

RUNWAY 6-24

RUNWAY 15-33 (5,499' x 100')

4,471' TORA 15
5,499' TODA 15
5,424' ASDA 15
4,522' LDA 15

5,499' TORA 33
5,499' TODA 33
5,499' ASDA 33
5,499' LDA 33

EXISTING RUNWAY PROTECTION ZONE
500' X 1,010' X 1,700'
(TO BE RELOCATED)

RUNWAY DATA	RUNWAY 15-33			
	EXISTING		FUTURE	
	RWY 15	RWY 33	RWY 15	RWY 33
TAKEOFF RUN AVAILABLE (TORA)	5,499'	5,499'	4,471'	5,499'
TAKEOFF DISTANCE AVAILABLE (TODA)	5,499'	5,499'	5,499'	5,499'
ACCELERATE STOP DISTANCE AVAILABLE (ASDA)	5,499'	5,499'	5,424'	5,499'
LANDING DISTANCE AVAILABLE (LDA)	5,499'	5,499'	4,522'	5,499'

PROJECT NO.
DATE 10-15-19
DR. TRO
SHT. #

333 North Alabama Street
Suite 200
Indianapolis, IN 46204
317.299.7500
FAX: 317.291.5805

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CROSSWIND RUNWAY 15-33 ALTERNATIVES
ALT. C-9 DECLARED DISTANCE TO FIX RW 33 ROFA AND RPZ
SPRINGFIELD-BECKLEY AIRPORT
SPRINGFIELD, OHIO

LEGEND

EXISTING/FUTURE RPZ	RPZ / RPZ
EXISTING/FUTURE OFA	OFA / OFA
EXISTING/FUTURE OFZ	OFZ / OFZ
EXISTING/FUTURE RSA	RSA / RSA
AIRPORT PROPERTY LINE	
AIRPORT SECURITY PERIMETER FENCE	

SCALE:
1" = 800'

EXISTING RUNWAY PROTECTION ZONE
500' X 1,010' X 1,700'
(TO BE RELOCATED)

RELOCATED RUNWAY PROTECTION ZONE
500' X 1,010' X 1,700'

RELOCATED RUNWAY PROTECTION ZONE
500' X 1,010' X 1,700'

EXISTING RUNWAY PROTECTION ZONE
500' X 1,010' X 1,700'
(TO BE RELOCATED)

TERMINAL BUILDING

PEACOCK ROAD

WEST BLEE ROAD (OHIO 794)

SOUTH YELLOW SPRING STREET (US 68)

JACKSON ROAD

RUNWAY 6-24

RUNWAY 15-33 (5,499' x 100')

TAXIWAY A

TAXIWAY E

TAXIWAY J

902'

1,028'

4,471' TORA 15
5,499' TODA 15
5,424' ASDA 15
5,424' LDA 15

5,499' TORA 33
5,499' TODA 33
5,499' ASDA 33
4,471' LDA 33

RUNWAY DATA	RUNWAY 15-33			
	EXISTING		FUTURE	
	RWY 15	RWY 33	RWY 15	RWY 33
TAKEOFF RUN AVAILABLE (TORA)	5,499'	5,499'	4,471'	5,499'
TAKEOFF DISTANCE AVAILABLE (TODA)	5,499'	5,499'	5,499'	5,499'
ACCELERATE STOP DISTANCE AVAILABLE (ASDA)	5,499'	5,499'	5,424'	5,499'
LANDING DISTANCE AVAILABLE (LDA)	5,499'	5,499'	5,424'	4,471'

PROJECT NO.
DATE 10-15-19
DR. TRO
SHT. #

333 North Alabama Street
Suite 200
Indianapolis, IN 46204
317.299.7500
FAX: 317.291.5805

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CROSSWIND RUNWAY 15-33 ALTERNATIVES

ALT. C-10 DECLARED DISTANCE TO FIX RW 33 ROFA AND RPZ AND RW 15 RPZ

SPRINGFIELD-BECKLEY AIRPORT
SPRINGFIELD, OHIO

U.S. Department of Transportation
Federal Aviation Administration

Detroit Airports District Office
11677 South Wayne Road
Suite 107
Romulus, MI 48174

May 16, 2016

Mr. Leo Shanayda, City Engineer
City of Springfield
Department of Engineering
76 East High Street
Springfield, OH 45502

Dear Mr. Shanayda:

Springfield-Beckley Airport, Springfield, Ohio
Review of Non-Standard FAA Specification

The Federal Aviation Administration (FAA) has reviewed your request for use of non-standard FAA specification for P-209. Based on our review, the FAA concurs with the proposed request.

Enclosed is an executed copy of the "FAA Great Lakes Region Request for Modification of Standards," requested on January 28, 2016, that provides an unconditional approval.

Sincerely,

Mary W. Jagiello

Mary W. Jagiello
Program Manager
Detroit Airports District Office

Enclosure

cc: Don Smith – Airport Manager ✓
Ohio Department of Aviation

FAA GREAT LAKES REGION
MODIFICATION OF AIRPORT DESIGN STANDARDS
COMPLETE FORM IN CONJUNCTION WITH THE USER GUIDE

BACKGROUND

1 AIRPORT:	2. LOCATION (CITY,STATE):	3 LOC ID:
Springfield-Beckley Municipal	Springfield, Ohio	SGH

4 EFFECTED RUNWAY/TAXIWAY:	5 APPROACH (EACH RUNWAY)	6 AIRPORT REF. CODE (ARC):
T-Hangar Taxilanes "E" and "F" (see attached drawing)	___ PIR ___ NPI _ VISUAL	C-III Airport B-I T-Hangar Area

7 DESIGN AIRCRAFT (EACH RUNWAY/TAXIWAY):

Piper PA 31T-620 Cheyenne II (9,000 lbs gross weight) using Reconstructed Taxilanes "E" and "F"

MODIFICATION OF STANDARDS

8. TITLE OF STANDARD(S) BEING MODIFIED (CITE REFERENCE DOCUMENT)

Use of FAA Construction Specifications for P-209 Crushed Aggregate Base Course

9 STANDARD/REQUIREMENT:

Must use FAA P-209

10 DESCRIPTION OF PROPOSED MODIFICATION:

Request use of ODOT 304 Aggregate Base

11. EXPLAIN WHY STANDARD(S) CANNOT BE MET.

The FAA standards can be met, but we believe it will be more cost efficient to use readily available materials that are familiar to the contractors instead of asking them to use materials that they may be unfamiliar with and that may need extensive changes in sieve screens and testing at stone plants to produce for such a small project (1,100 C.Y.)

AC 150/5370-10G permits the use of state DOT asphalt pavement with prior approval of the FAA for pavements used by aircraft not more than 12,500 pounds gross weight. The two taxiway pavements being reconstructed are only 694' by 25' and 218' by 25'.

12 DISCUSS ALL VIABLE ALTERNATIVES:

Options include using P-209, using ODOT 304, or using P-209 that has been modified to permit the use of materials meeting ODOT 304 but requiring construction and testing per P-209. A copy of the full specification for incorporation into the Specifications and Bidding Documents for this project is also attached (Attachment B).

13. ASSURANCE THAT MTS WILL PROVIDE AS OUTLINED IN THE USER GUIDE:

The proposed material specification has been used on Federal Highway funded projects in Ohio for decades, as well as state funded projects. The specification is often referenced by municipalities for use on their projects. Our airport consultant for this project has advised us that they have used ODOT 446 materials and P-401 or P-403 installation and testing on non-FAA hangar taxilane projects at Union County Airport, Newark-Heath Airport, Carl Keller Field, and Greater Portsmouth Regional Airport with no noticeable difference in pavement life from similar FAA funded pavements. A comparison of the specs is contained in Attachment A. A copy of the full specification for incorporation in the Specifications and Bidding Documents for this project is also attached (Attachment B).

ATTACH ADDITIONAL SHEETS AS NECESSARY – INCLUDE SKETCH/PLAN

FAA GREAT LAKES REGION
MODIFICATION OF AIRPORT DESIGN STANDARDS

14. Skip to Question 15 if request is not for a Modification To Material Standards or Construction Methods.

CHECK WHEN APPLICABLE	
☐	Modifications to materials standards is requested because locally available materials cannot meet the requirements of that standard.
☒	Modifications to construction methods standards will result in cost savings and/or greater efficiency.
☐	Bids have already been received for this project.

IF ANY OF THE ABOVE IS CHECKED PLEASE PROVIDE ADDITIONAL DETAILS.

While we are requesting a modification to materials for aggregate base, we are not doing so because the materials cannot meet the FAA specification but because the material would need to be specially produced and stockpiled. In addition, most contractors bidding on this small project will likely not have worked with FAA crushed aggregate base, testing, or construction requirements.

We believe that the change in the FAA specification will result in a cost savings of approximately $5 per C.Y. for the aggregate base We estimate that we will have approximately 1,100 c.y. of aggregate base on the project, so this will likely save us around $5,500.

15. SIGNATURE OF ORIGINATOR:	16. PRINTED NAME OF ORIGINATOR	17. DATE
	Leo Shanayda, City Engineer	1/29/16
18. ORIGINATOR'S ORGANIZATION:	19. TELEPHONE	20. E-MAIL
City of Springfield, Ohio	(937) 324-7310	lshanayda@springfieldohio.gov
21. DATE OF LATEST FAA SIGNED ALP		
AUGUST 10, 2005		

BELOW IS TO BE COMPLETED BY FAA

22. ADO RECOMMENDATION	23. SIGNATURE	24. DATE
Concur	Mary W Gaigello	4/5/16

25. FAA DIVISIONAL REVIEW (AT, AF, FS, etc.):
RO coordination complete see attached email

ROUTING SYMBOL	SIGNATURE	DATE	CONCUR	NON-CONCUR

COMMENTS:
FOR Less than 12,500 lb aircraft, ODOT specs can be used for taxiways

26. AIRPORTS DIVISION FINAL ACTION:

☒ UNCONDITIONAL APPROVAL	☐ CONDITIONAL APPROVAL	☐ [redacted]

DATE:	SIGNATURE	TITLE:
5/16/16	[signature]	MANAGER, DET ADO

CONDITIONS OF APPROVAL:

U.S. Department
of Transportation
**Federal Aviation
Administration**

**Detroit Airports District Office
11677 South Wayne Road
Suite 107
Romulus, MI 48174**

May 16, 2016

Mr. Leo Shanayda, City Engineer
City of Springfield
Department of Engineering
76 East High Street
Springfield, OH 45502

Dear Mr. Shanayda:

Springfield-Beckley Airport, Springfield, Ohio
Review of Non-Standard FAA Specification

The Federal Aviation Administration (FAA) has reviewed your request for use of non-standard FAA specification for P-403. Based on our review, the FAA concurs with the proposed request.

Enclosed is an executed copy of the "FAA Great Lakes Region Request for Modification of Standards," requested on January 28, 2016, that provides an unconditional approval.

Sincerely,

Mary W. Jagiello

Mary W. Jagiello
Program Manager
Detroit Airports District Office

Enclosure

cc: Don Smith – Airport Manager ✓
Ohio Department of Aviation

FAA GREAT LAKES REGION
MODIFICATION OF AIRPORT DESIGN STANDARDS
COMPLETE FORM IN CONJUNCTION WITH THE USER GUIDE

BACKGROUND

1. AIRPORT:	2. LOCATION (CITY,STATE):	3. LOC ID.
Springfield-Beckley Municipal	Springfield, Ohio	SGH

4. EFFECTED RUNWAY/TAXIWAY:	5. APPROACH (EACH RUNWAY):	6. AIRPORT REF. CODE (ARC):
T-Hangar Taxilanes "E" and "F" (see attached drawing)	___ PIR ___ NPI ___ VISUAL	C-III Airport B-1 T-Hangar Area

7. DESIGN AIRCRAFT (EACH RUNWAY/TAXIWAY):

Piper PA 31T-620 Cheyenne II (9,000 lbs gross weight) using Reconstructed Taxilanes "E" and "F"

MODIFICATION OF STANDARDS

8. TITLE OF STANDARD(S) BEING MODIFIED (CITE REFERENCE DOCUMENT):

Use of FAA Construction Specifications for HMA Surface Course (P-403)

9. STANDARD/REQUIREMENT:

Must use FAA P-403

10. DESCRIPTION OF PROPOSED MODIFICATION:

Request use of ODOT 448 Asphalt Concrete (Type 1 Surface and Intermediate)

11. EXPLAIN WHY STANDARD(S) CANNOT BE MET:

The FAA standards can be met, but we believe it will be more cost efficient to use readily available materials that are familiar to the contractors instead of asking them to use materials that they may be unfamiliar with and that may need extensive changes in sieve screens and testing at asphalt plants to produce for such a small project (733 tons)

AC 150/5370-10G permits the use of state DOT asphalt pavement with prior approval of the FAA for pavements used by aircraft not more than 12,500 pounds gross weight. The two taxiway pavements being reconstructed are only 694' by 25' and 218' by 25'

12. DISCUSS ALL VIABLE ALTERNATIVES:

Options include using P-403, using ODOT 448, or using P-403 that has been modified to permit the use of materials meeting ODOT 448 but requiring construction and testing per P-403.

13. ASSURANCE THAT MTS WILL PROVIDE AS OUTLINED IN THE 'USER GUIDE':

The proposed material specification has been used on Federal Highway funded projects in Ohio for decades, as well as state funded projects. The specification is also often referenced by municipalities for use on their projects. A comparison of the specs is contained in Attachment A. A copy of the full specification for incorporation into the Specifications and Bidding Documents for this project is also attached (Attachment B).

ATTACH ADDITIONAL SHEETS AS NECESSARY – INCLUDE SKETCH/PLAN

FAA GREAT LAKES REGION
MODIFICATION OF AIRPORT DESIGN STANDARDS

14. Skip to Question 15 if request is not for a Modification To Material Standards or Construction Methods

	CHECK WHEN APPLICABLE
☐	Modifications to materials standards is requested because locally available materials cannot meet the requirements of that standard.
☒	Modifications to construction methods standards will result in cost savings and/or greater efficiency.
☐	Bids have already been received for this project.

IF ANY OF THE ABOVE IS CHECKED PLEASE PROVIDE ADDITIONAL DETAILS.

While we are requesting a modification to materials for asphalt concrete, we are not doing so because the materials cannot meet the FAA specification but because the material would need to be specially produced and stockpiled. Potentially, significant changes to existing JMFs would also be required. In addition, most contractors bidding on this small project will likely not have worked with FAA asphalt concrete mixes, testing, or construction requirements.

We believe that the change from the FAA specification to the ODOT specification will result in a cost savings of approximately $10 per ton for the asphalt concrete. We estimate that we will have approximately 733 tons of asphalt pavement on the project, so this will likely save us around $7,330.

15. SIGNATURE OF ORIGINATOR	16. PRINTED NAME OF ORIGINATOR	17. DATE
	Leo Shanayda, City Engineer	1/29/16
18. ORIGINATOR'S ORGANIZATION	**19. TELEPHONE**	**20. E-MAIL**
City of Springfield, Ohio	(937) 324-7310	lshanayda@springfieldohio.gov

21. DATE OF LATEST FAA SIGNED ALP

AUGUST 10, 2005

BELOW IS TO BE COMPLETED BY FAA

22. ADO RECOMMENDATION:	23. SIGNATURE:	24 DATE:
Concur	Mary Fagiello	5-16-16

25. FAA DIVISIONAL REVIEW (AT, AF, FS, etc.):

ROUTING SYMBOL	SIGNATURE	DATE	CONCUR	NON-CONCUR

COMMENTS:
For less than 12,500 lbs, ODOT specs can be used for taxiways.

26. AIRPORTS' DIVISION FINAL ACTION:

☑ UNCONDITIONAL APPROVAL	☐ CONDITIONAL APPROVAL	☐ [redacted]

DATE:	SIGNATURE:	TITLE:
5/16/16	[signature]	MANAGER, DET ADO

CONDITIONS OF APPROVAL:

U.S. Department of Transportation
Federal Aviation Administration

Detroit Airports District Office
11677 South Wayne Road
Suite 107
Romulus, MI 48174

May 16, 2016

Mr. Leo Shanayda, City Engineer
City of Springfield
Department of Engineering
76 East High Street
Springfield, OH 45502

Modification of Airport Design Standards – Taxilanes A & F
Springfield-Beckley Airport, Springfield, Ohio

Dear Mr. Shanayda:

The Federal Aviation Administration (FAA) has reviewed your modification of standards (MOS) request dated January 28, 2016 regarding Taxilanes A and F Object Free Area (TOFA). The specific request involves moving the movement/non-movement boundary 3 feet inside the standard TOFA of 39.5'. The distance from Taxiway Centerline to Fixed/Movable Objects is proposed at 36.5 feet. The critical aircraft identified for these taxilanes is the Cessna 402.

This request is in accordance with Engineering Brief No. 78 (EB #78), *Linear Equations for Evaluating the Separation of Airplane Design Groups on Parallel Taxiways and Taxiways to Fixed/Movable Objects*. Based on the information provided, the request is conditionally approved. The conditions of the approval are as follows:

1. Aircraft is limited to wing span of 44.17' on taxilanes A & F.

This modification shall remain in effect until such time where it is possible to reconfigure the taxilane to allow for a standard taxiway to fixed/movable object dimension as specified in Advisory Circular (AC) 150/5300-13, *Airport Design*. Any new construction or major reconstruction that receives Federal funding under the Airport Improvement Program (AIP) is subject to all applicable design standards. In the case of new construction or major reconstruction not receiving AIP Federal funding it is highly recommended that such construction comply with all applicable design standards. In the interim, we will show this modification to standards on the currently approved airport layout plan dated August 10, 2005.

This modification of standards would have to be reevaluated if a design aircraft with a wingspan larger than the Cessna 402 is proposed to utilize Taxilanes A and F.

Sincerely,

Mary W. Jagiello

Mary W. Jagiello
Program Manager
Detroit Airports District Office

Enclosures
FAA Request for Modification of Standards

FAA GREAT LAKES REGION
MODIFICATION OF AIRPORT DESIGN STANDARDS
COMPLETE FORM IN CONJUNCTION WITH THE USER GUIDE

BACKGROUND

1. AIRPORT:	2. LOCATION (CITY,STATE)	3. LOC ID:
Springfield-Beckley Municipal	Springfield, Ohio	SGH

4. EFFECTED RUNWAY/TAXIWAY:	5. APPROACH (EACH RUNWAY)	6. AIRPORT REF. CODE (ARC):
T-Hangar Taxilanes "A" and "F"	__ PIR __ NPI VISUAL	C-III Airport B-I T-Hangar Area

7. DESIGN AIRCRAFT (EACH RUNWAY/TAXIWAY):

Cessna 402 (44.17' wingspan) using Taxilanes "A" and "F"

MODIFICATION OF STANDARDS

8. TITLE OF STANDARD(S) BEING MODIFIED (CITE REFERENCE DOCUMENT):

Taxilane Centerline to Fixed or Movable Object

9. STANDARD/REQUIREMENT:

For B-I Aircraft the requirement is 39.5 feet

10. DESCRIPTION OF PROPOSED MODIFICATION:

Change to 36.5 feet

11. EXPLAIN WHY STANDARD(S) CANNOT BE MET:

Limitations on space available at the existing hangar site for construction of additional hangars (see Attachment "A")

12. DISCUSS ALL VIABLE ALTERNATIVES:

See Attachment "A"

13. ASSURANCE THAT MTS WILL PROVIDE AS OUTLINED IN THE USER GUIDE:

Requested change is based on previous FAA formula for determination of taxilane object free area requirement contained in FAA Advisory Circulars for design prior to the 2012 change. We believe that the taxilane object free area requirement is still based on this formula, although it is no longer included in the current design circular

Aircraft with 49 foot wingspans do not need to use Taxilanes "A" and "F" because there are no existing or proposed hangars at the ends of these taxilanes that can accommodate them. Aircraft with wingspans of around 44 feet using Taxilanes "A" and "F" should not need the same separation that the larger aircraft require. If the formula for taxilane object free area, used on numerous airport projects, is permitted to be used for the proposed project, the resultant object free area would require a taxilane to object separation of 36.5 feet. ✓

ATTACH ADDITIONAL SHEETS AS NECESSARY – INCLUDE SKETCH/PLAN

FAA GREAT LAKES REGION
MODIFICATION OF AIRPORT DESIGN STANDARDS

14 Skip to Question 15 if request is not for a Modification To Material Standards or Construction Methods

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☐	Bids have already been received for this project.

IF ANY OF THE ABOVE IS CHECKED PLEASE PROVIDE ADDITIONAL DETAILS

15 SIGNATURE OF ORIGINATOR	16 PRINTED NAME OF ORIGINATOR	17 DATE
	Leo Shanayda, City Engineer	1/28/16
18 ORIGINATOR'S ORGANIZATION:	19 TELEPHONE	20 E-MAIL
City of Springfield, Ohio	(937) 324-7310	lshanayda@springfieldohio.gov

21 DATE OF LATEST FAA SIGNED ALP

AUGUST 10, 2005

BELOW IS TO BE COMPLETED BY FAA

22. ADO RECOMMENDATION	23 SIGNATURE	24 DATE
CONCUR Mary Jagiello	Mary Jagiello	5-16-16

25. FAA DIVISIONAL REVIEW (AT, AF, TS, etc.)

ROUTING SYMBOL	SIGNATURE	DATE	CONCUR	NON-CONCUR

COMMENTS: TAXILANE C/L to fixed or movable object meets the requirement of Engineering Brief 78 and ~~is~~ meets acceptable level of safety.

26 AIRPORTS DIVISION FINAL ACTION

☐ UNCONDITIONAL APPROVAL ☒ CONDITIONAL APPROVAL ☐ [redacted]

DATE	SIGNATURE	TITLE
5/16/16	/s/ Mayfield Jr	MANAGER, DET ADO

CONDITIONS OF APPROVAL:
Traffic will be limited to a wingspan 44.17 on Taxilanes A + F.