

Duluth Airport Master Plan

Project Update – Taxiway A

September 21, 2021



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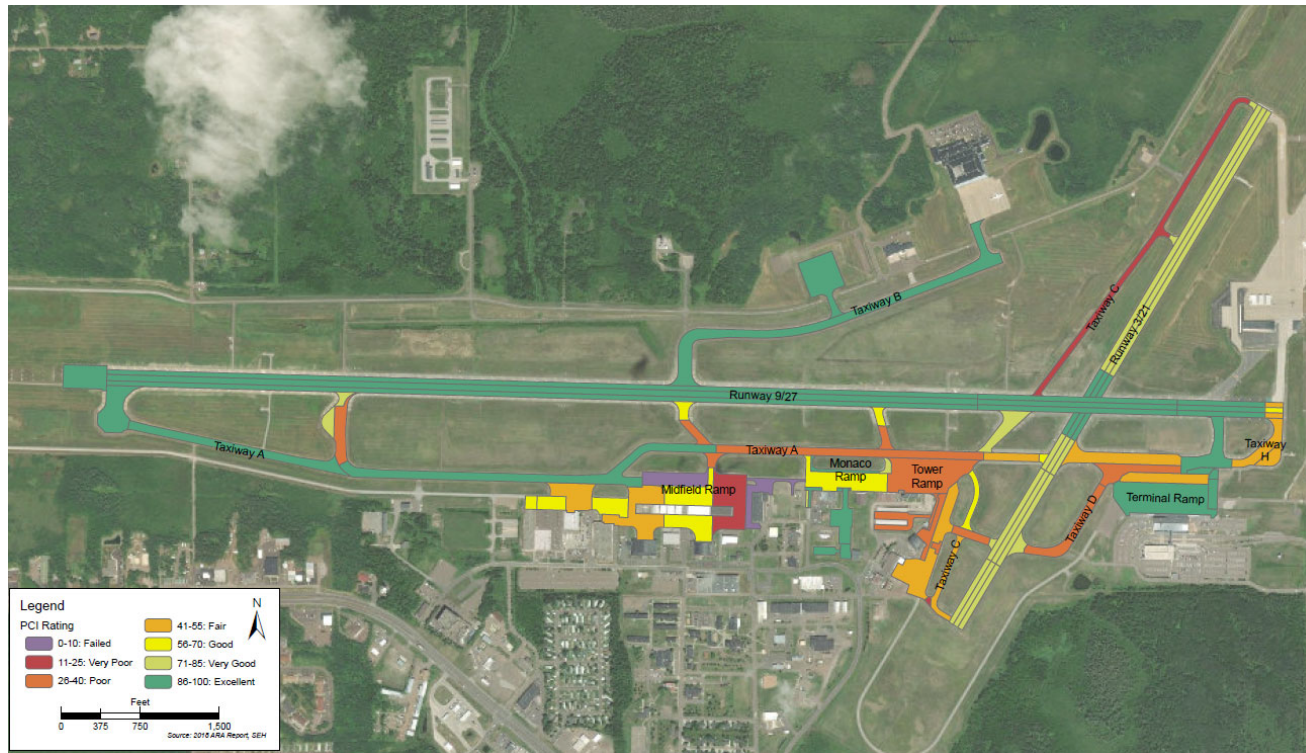
Existing Taxiway A

- Full-length parallel taxiway
- Partial taxiway shoulders
- Mostly bituminous pavement



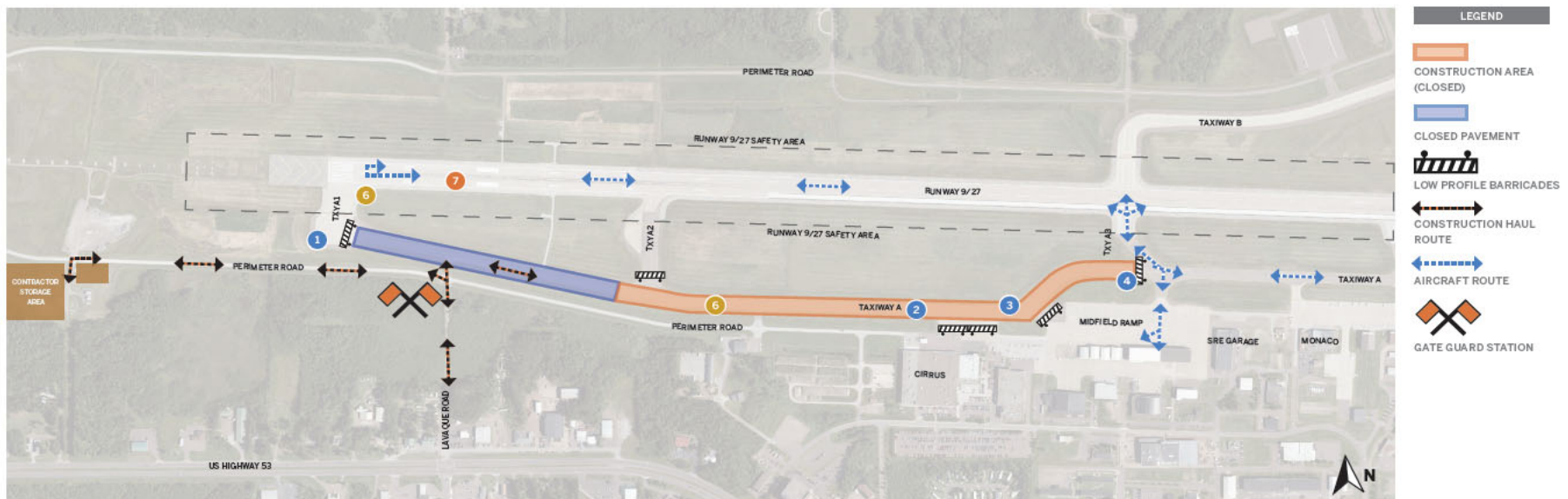
Pavement Condition (PCI)

- Mill and Overlay project on the west half of Taxiway A (2020)
- Condition below the pavement is not reflected in the PCI

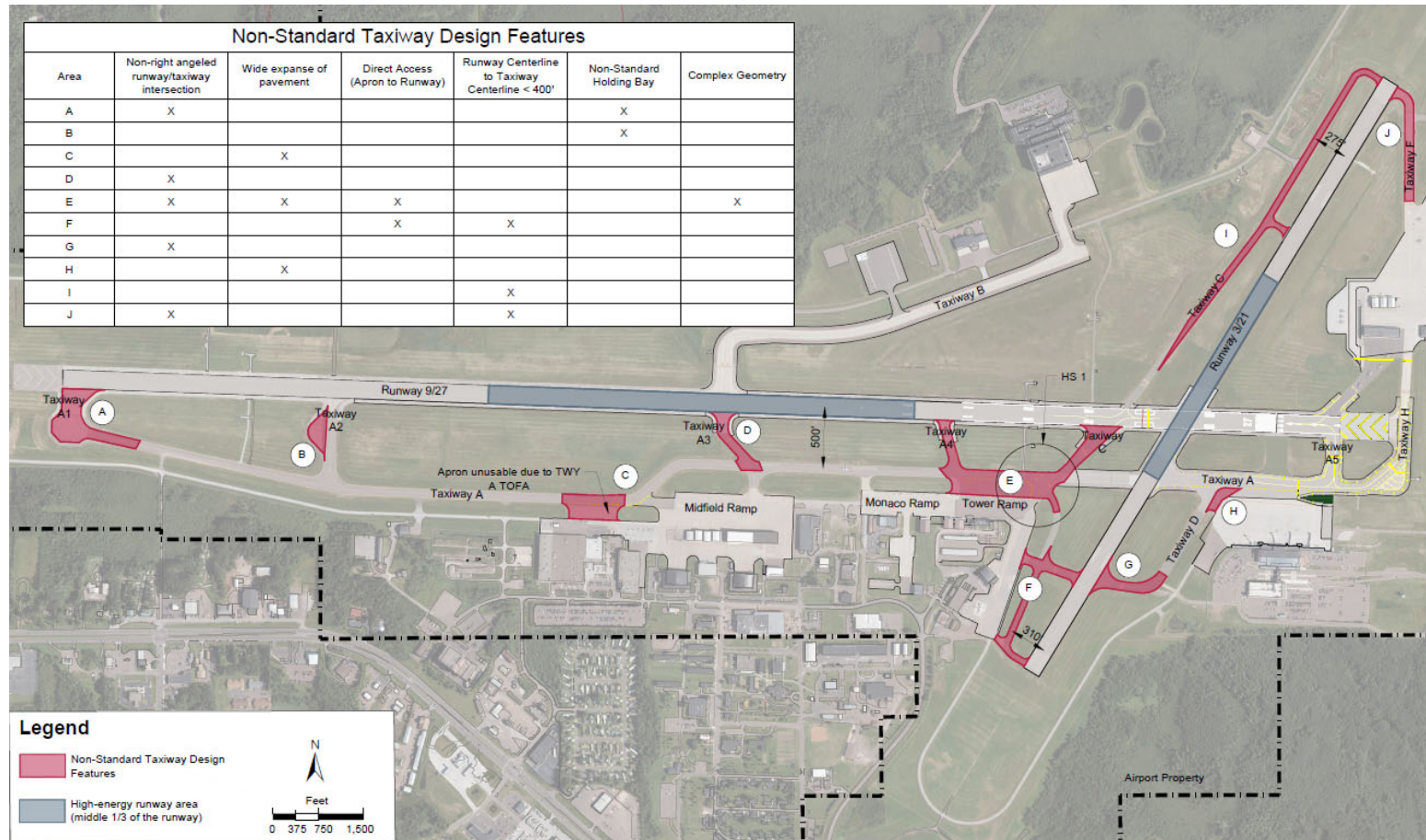


Taxiway A West – 2020 Mill and Overlay

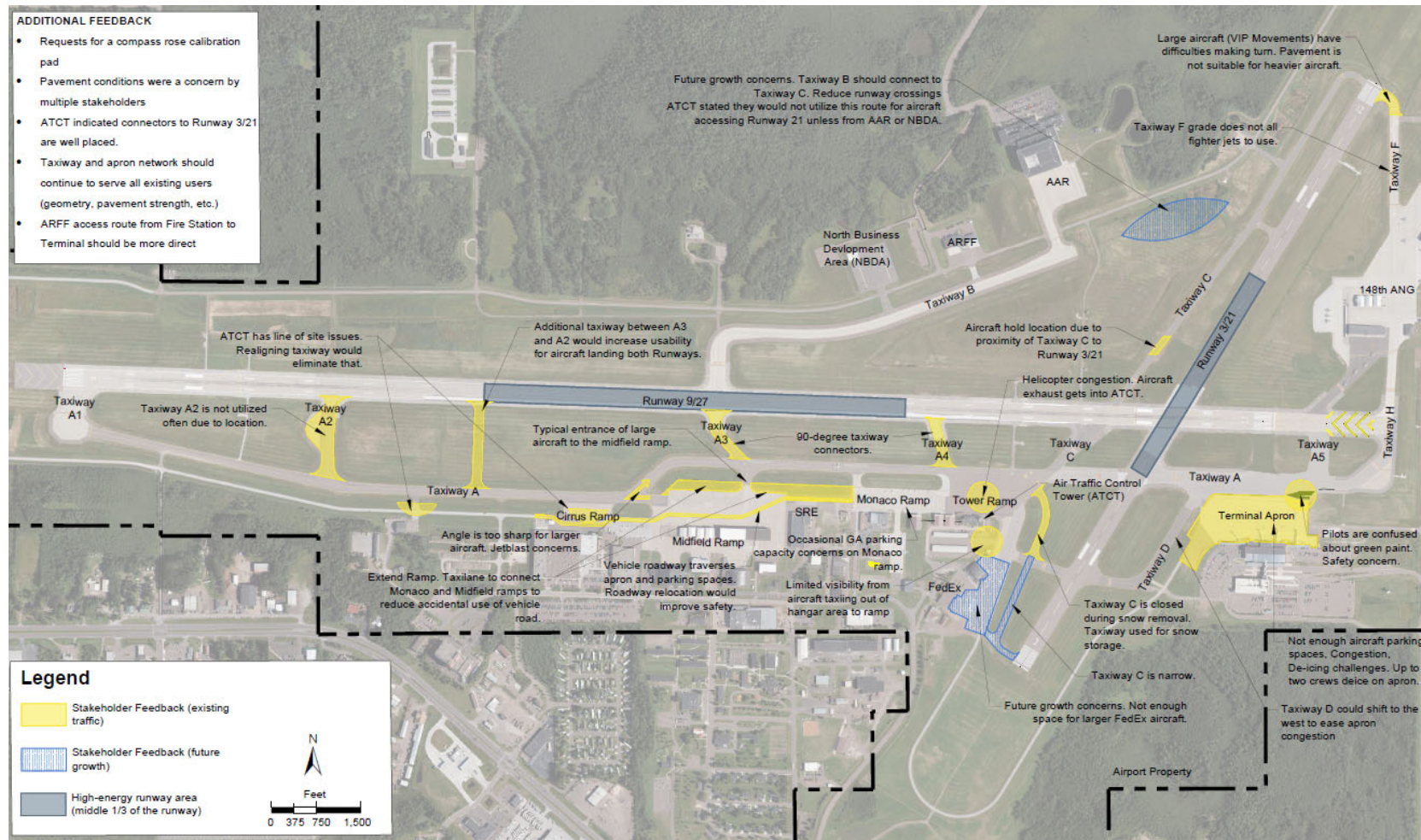
- Intended to be a **short-term fix**
- Allowed for further planning of Taxiway A to take place in Master Plan



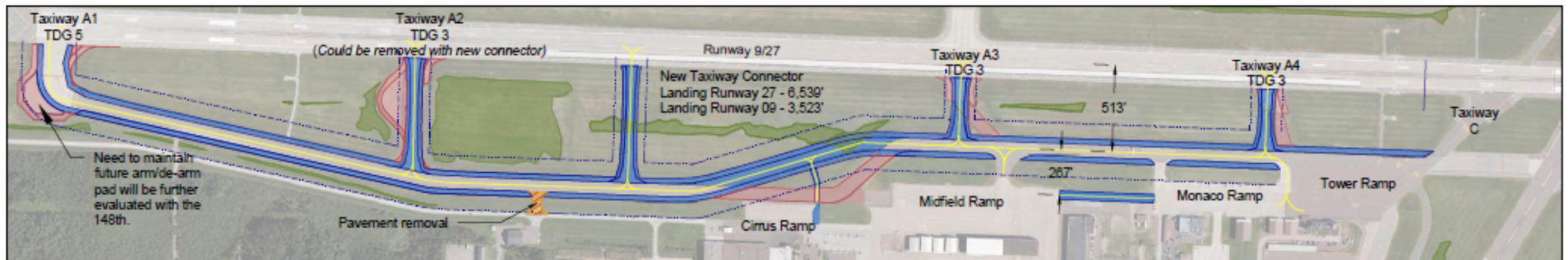
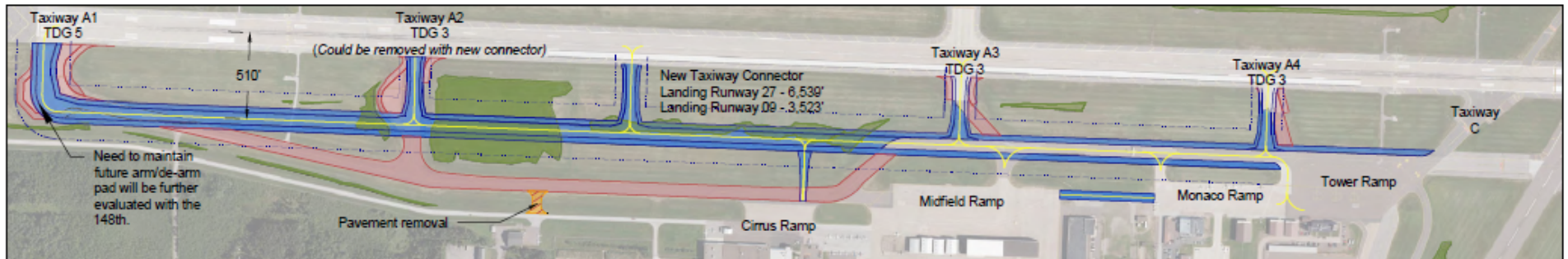
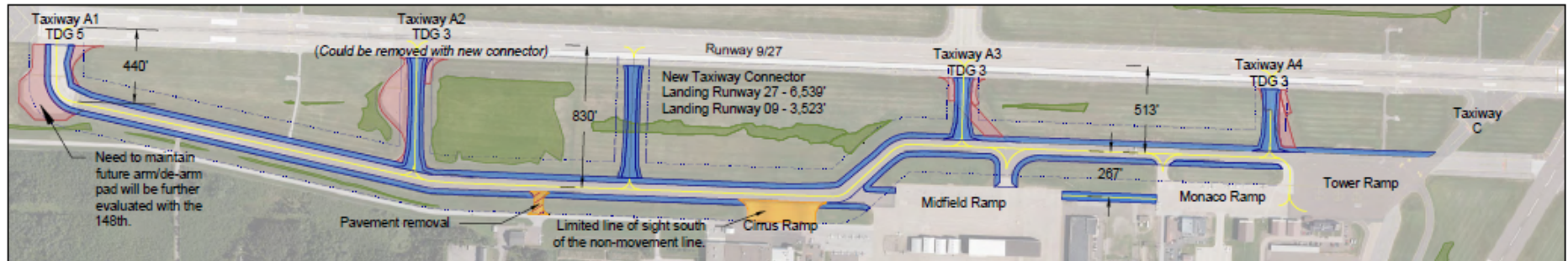
Non-standard Design Features



Stakeholder Feedback



Taxiway A – Preliminary Alternatives



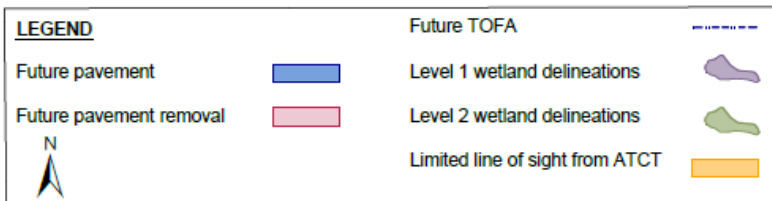
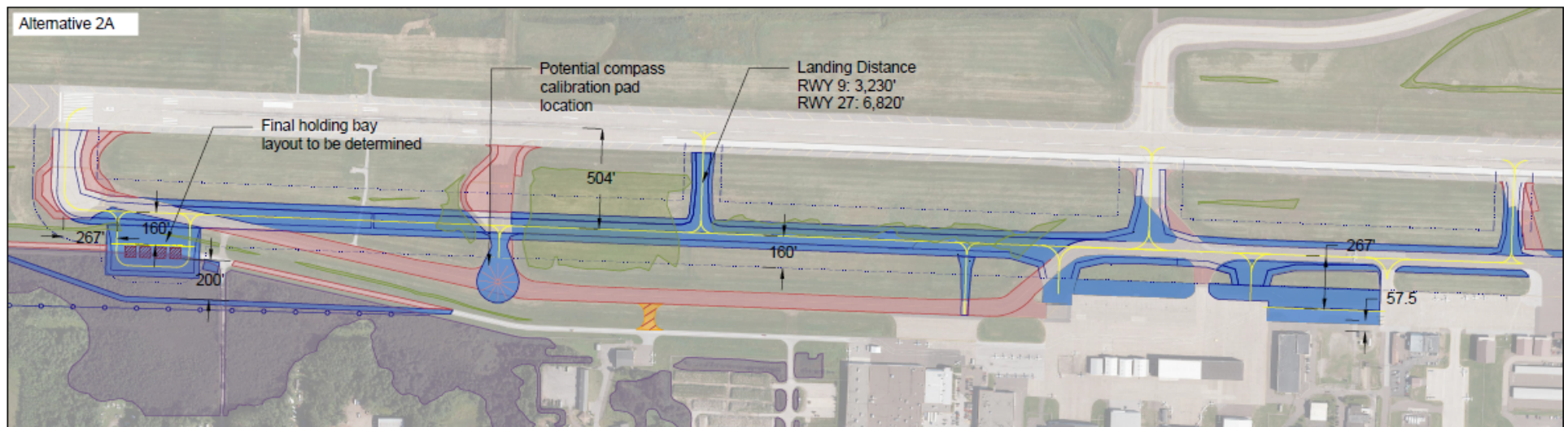
Future TOFA



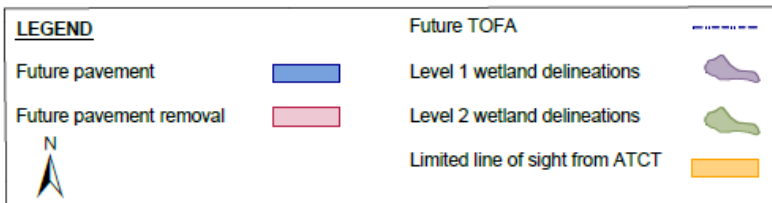
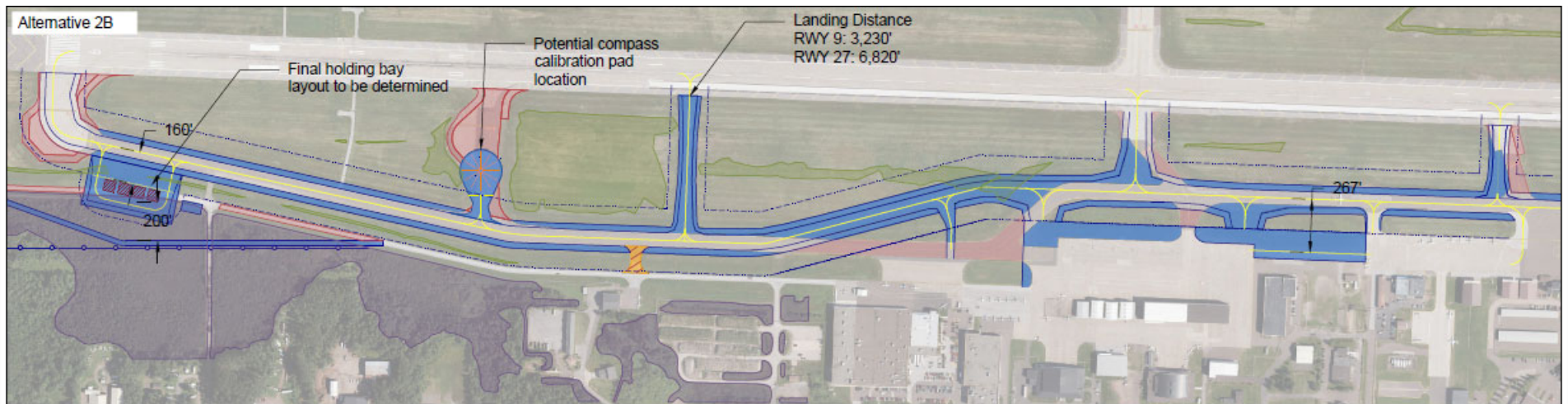
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Taxiway A – Alternative 2A (Straight Parallel) *Second Round of Alternatives*



Taxiway A – Alternative 2B (Modified Existing) *Second Round of Alternatives*



Taxiway TAC Meeting 1 Feedback

Preferred Taxiway A Alignment

SEH VISION 2040

1

Full Parallel Taxiway A
(2A)

6

Modified Existing
Taxiway A (2B)

2

I'm not sure et or would like to
further evaluate building area
alternatives before deciding

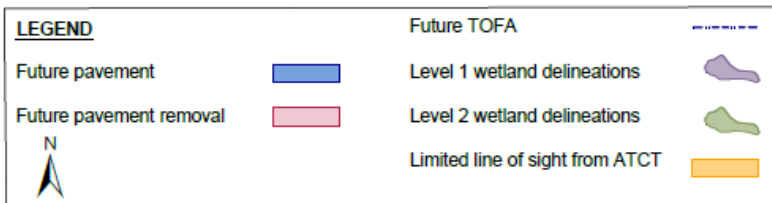
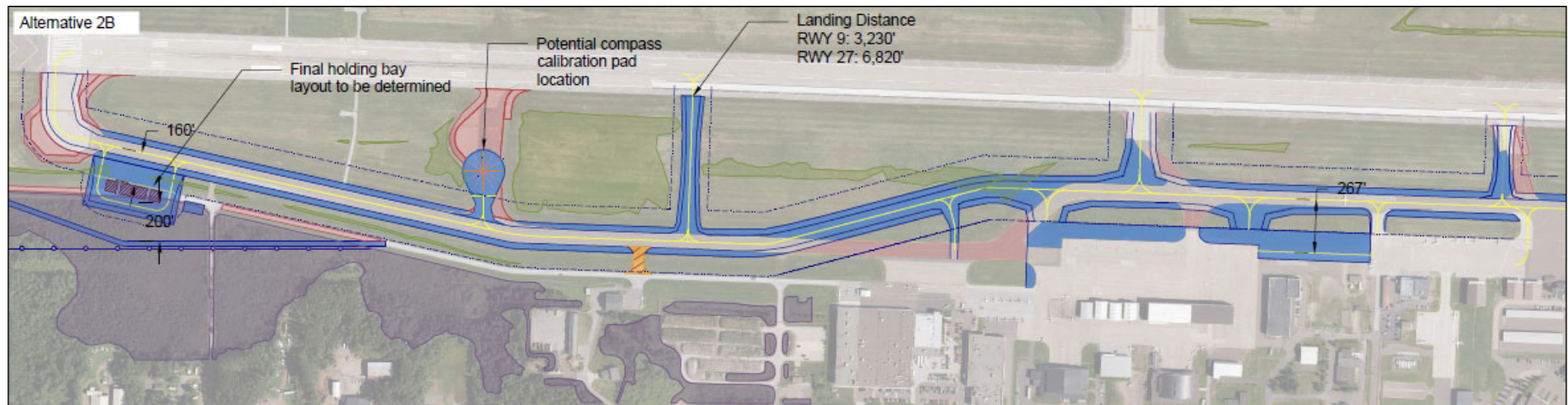


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VISION 2040

Taxiway A – Preferred Alternative (Alt 2B)

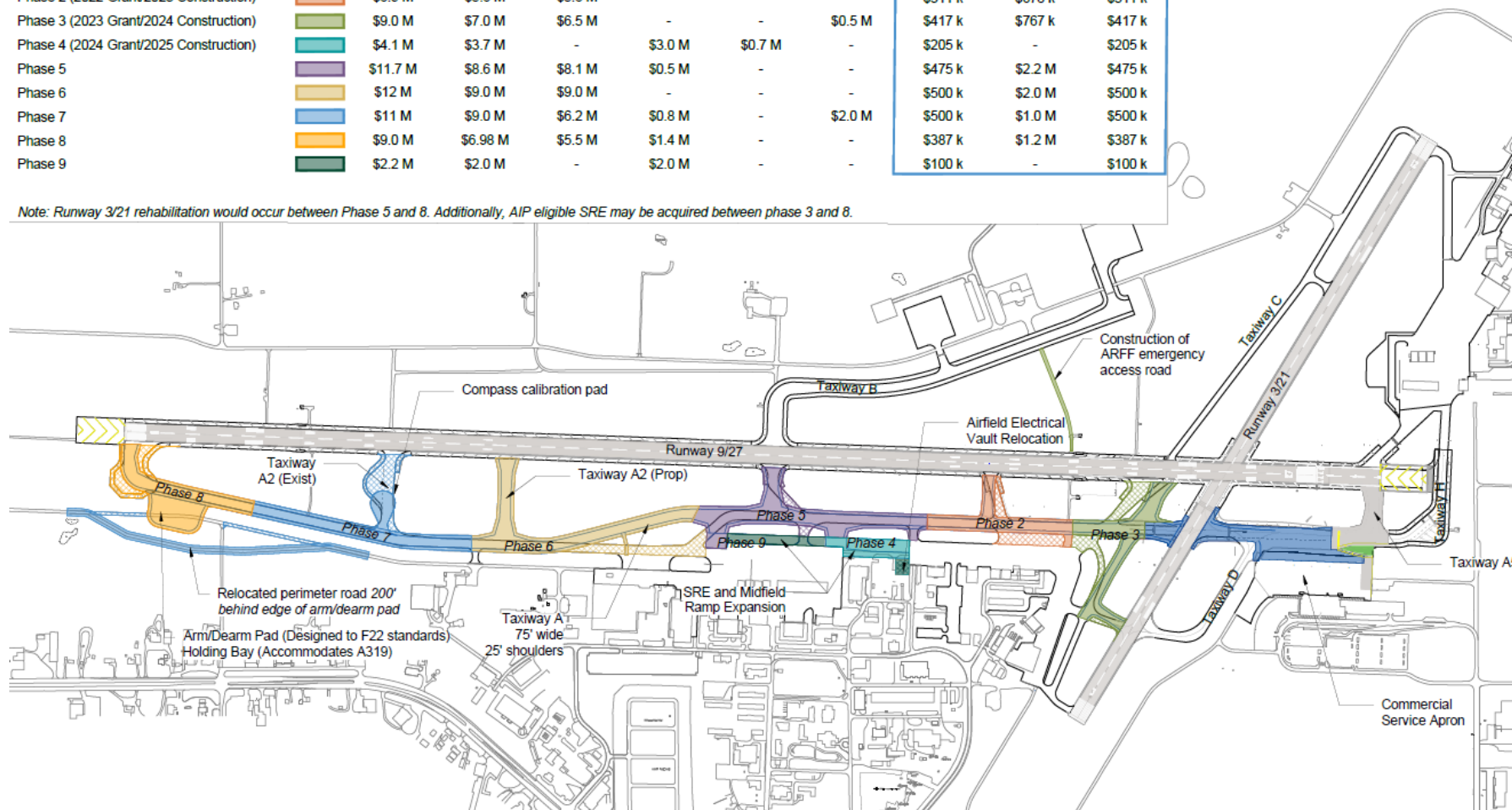


Taxiway A – Multi-Year Phasing Project

Estimated Project Cost

		TOTAL COST	FAA COST	FAA TAXIWAY	FAA APRON	VAULT RELOCATION	FAA ACCESS ROAD	DAA LOCAL SHARE	148th SHARE	MnDOT SHARE
Phase 1 (2021 Grant/2022 Construction)										
Phase 2 (2022 Grant/2023 Construction)		\$6.9 M	\$5.6 M	\$5.6 M	-	-	-	\$311 k	\$678 k	\$311 k
Phase 3 (2023 Grant/2024 Construction)		\$9.0 M	\$7.0 M	\$6.5 M	-	-	\$0.5 M	\$417 k	\$767 k	\$417 k
Phase 4 (2024 Grant/2025 Construction)		\$4.1 M	\$3.7 M	-	\$3.0 M	\$0.7 M	-	\$205 k	-	\$205 k
Phase 5		\$11.7 M	\$8.6 M	\$8.1 M	\$0.5 M	-	-	\$475 k	\$2.2 M	\$475 k
Phase 6		\$12 M	\$9.0 M	\$9.0 M	-	-	-	\$500 k	\$2.0 M	\$500 k
Phase 7		\$11 M	\$9.0 M	\$6.2 M	\$0.8 M	-	\$2.0 M	\$500 k	\$1.0 M	\$500 k
Phase 8		\$9.0 M	\$6.98 M	\$5.5 M	\$1.4 M	-	-	\$387 k	\$1.2 M	\$387 k
Phase 9		\$2.2 M	\$2.0 M	-	\$2.0 M	-	-	\$100 k	-	\$100 k

Note: Runway 3/21 rehabilitation would occur between Phase 5 and 8. Additionally, AIP eligible SRE may be acquired between phase 3 and 8.



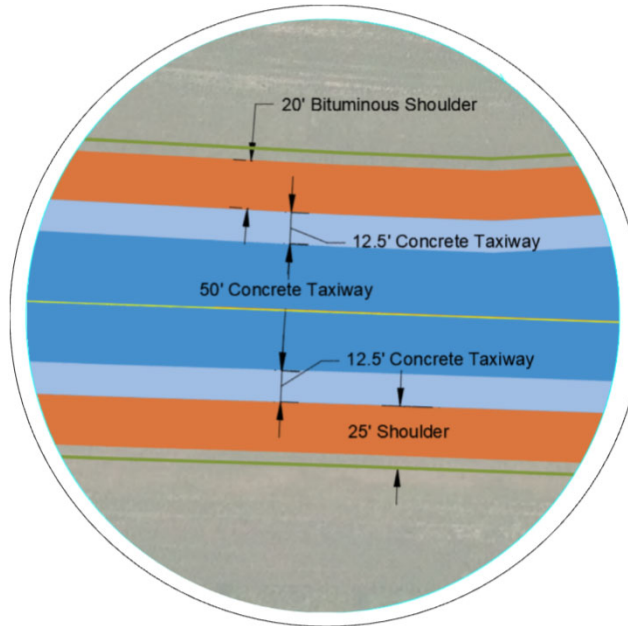
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Taxiway A Cost Eligibility

Estimated Project Cost

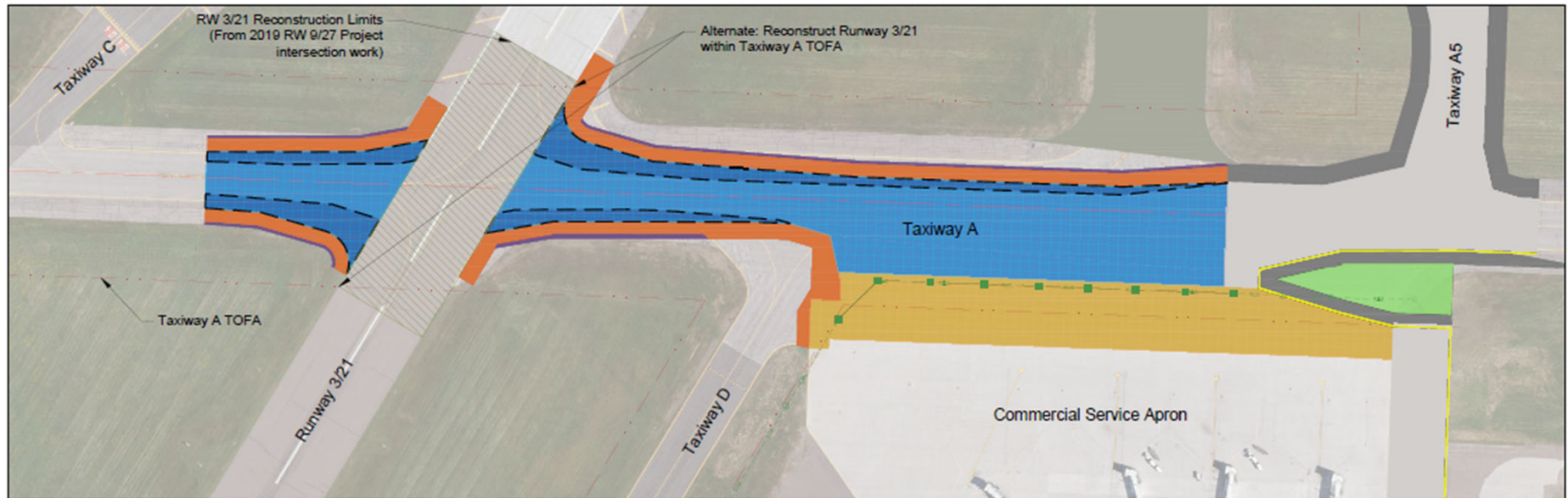
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Taxiway A Reconstruction – Phase 1



Legend

	Eligible Concrete Pavement (132,324 SF) (Taxiway A, 50' width, TDG 3 Geometry)		Eligible Bituminous Pavement (56,267 SF) (TDG 3, 20' shoulders, incidental tie-in pavement)		Apron Reconstruction (86,020 SF) (Reconstruction required to ensure surface drainage. Failing pavement, work items incidental to Taxiway A Reconstruction and replacement of failing drainage structures)		Failing Storm Structure (Anticipated Rebuild)
	Ineligible Concrete Pavement (42,175 SF) (TDG 5 Geometry, additional 25' width)		Ineligible Bituminous Pavement (9,350 SF) (additional 5' of shoulder width)		Alternate: Runway 3/21 Reconstruction (69,032 SF) (Reconstruct to limits of Taxiway A TOFA)		Storm Sewer Pipe (Aligned with required structures to rebuild)

- Reconstruction of Taxiway A (1,800 feet x 75 feet)
- Reconstruction of taxiway shoulders (25 feet wide)
- Drainage structure and draintile improvements
- Taxiway lighting, signage and lighting control upgrades

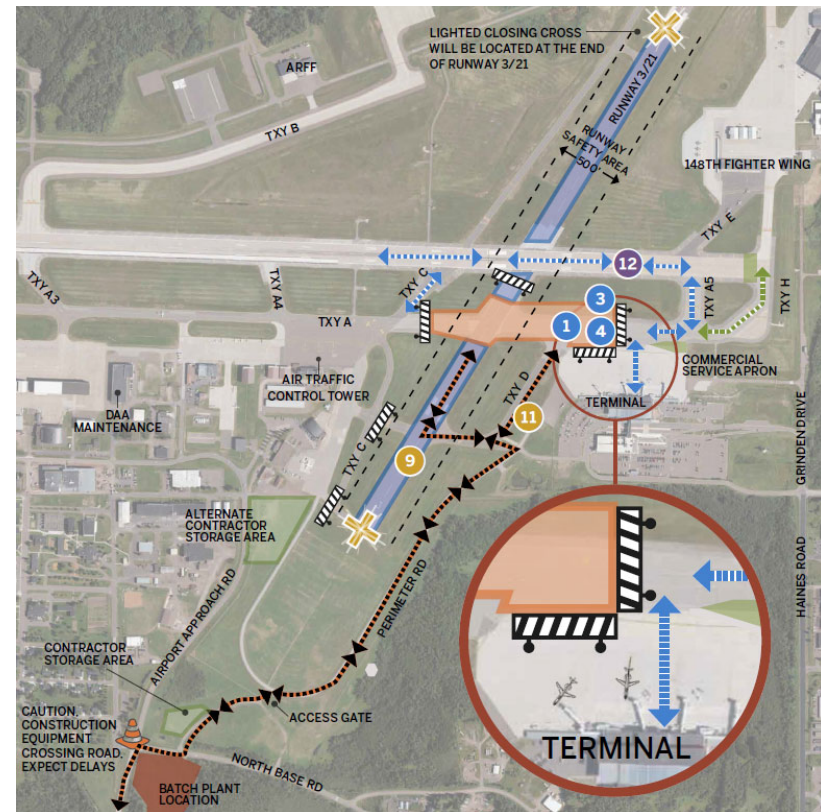


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Phase 1 (1A) – 2022 Construction (Funded in 2021)

- Estimated Duration: 65 Days
- Airfield Closures
 - Runway 3-21
 - Portions of Taxiway A and Terminal Ramp
 - Taxiway D
- Instrument Approach Procedures for 9/27 will be raised to 1 mile

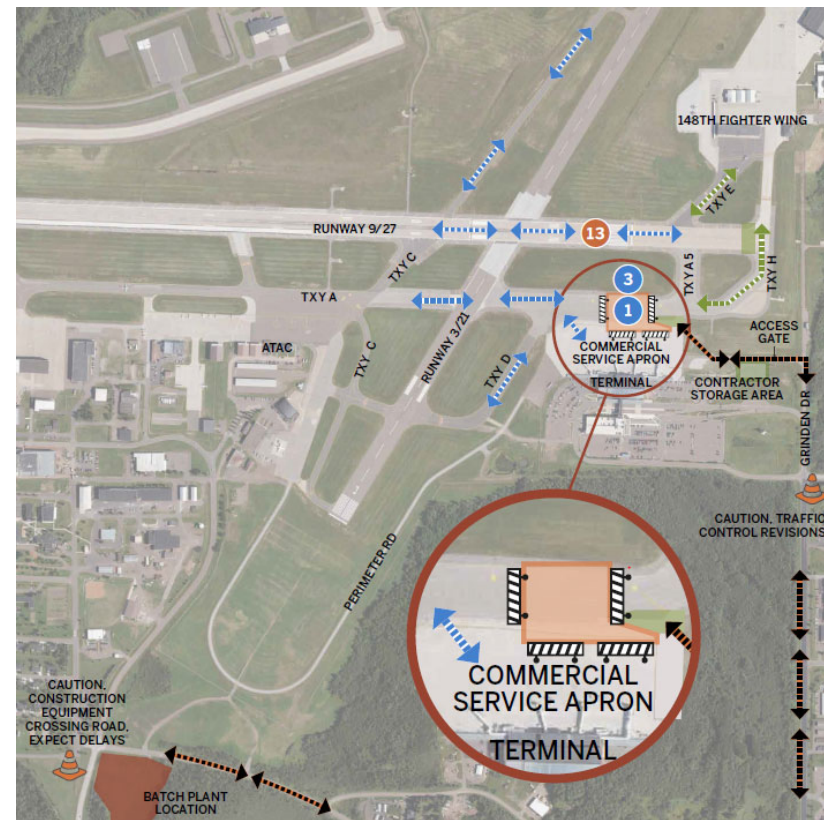


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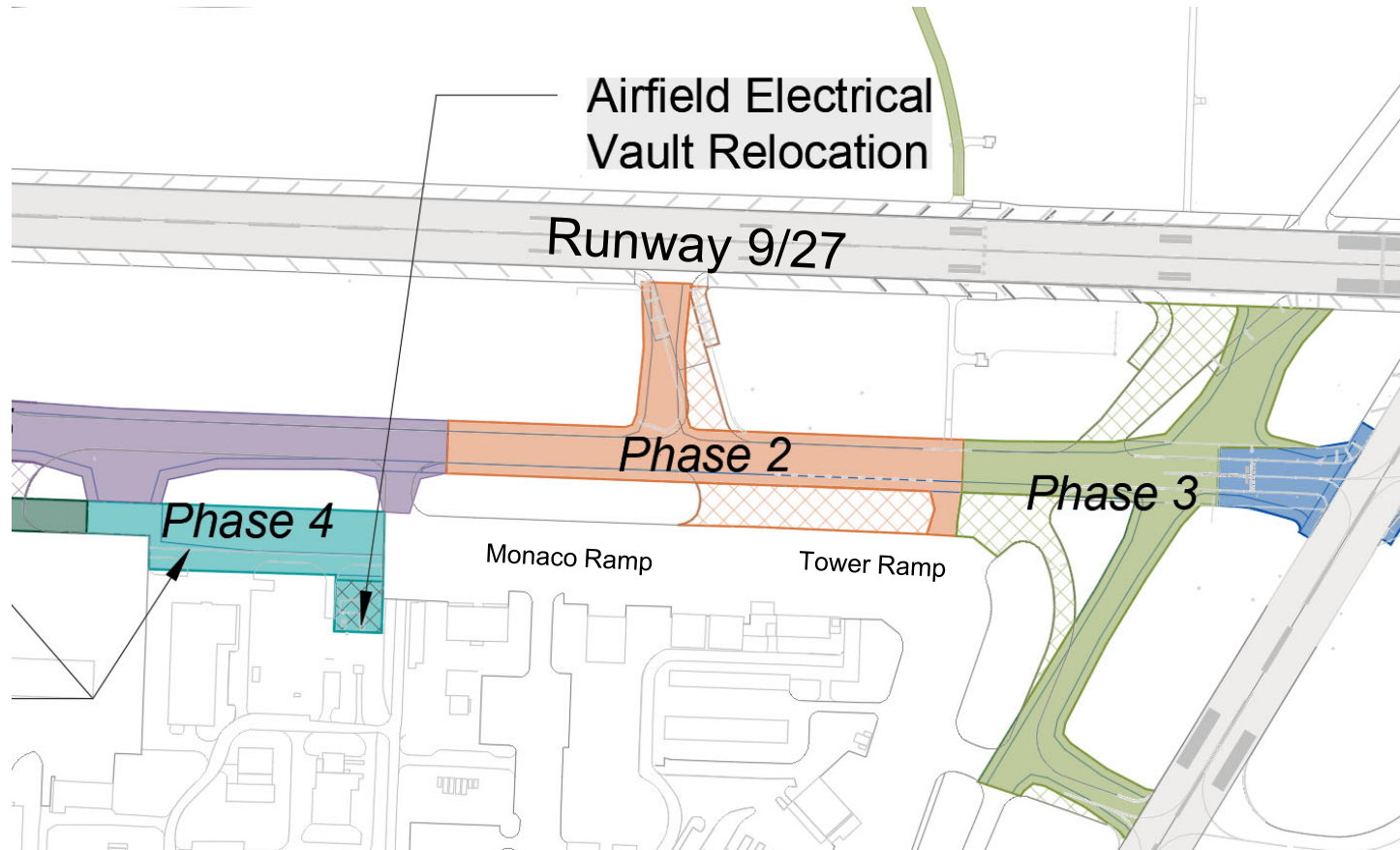


Phase 1 (1B) – 2022 Construction (Funded in 2021)

- Estimated Duration: 40 Days
- Airfield Closures
 - Portions of Taxiway A and Terminal Ramp
- Instrument Approach Procedures for 9/27 will be raised to 1 mile



Phase 2 – 2022 Grant/2023 Construction



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Phase 2 Schedule

- October through December 2021 – preliminary engineering
- January 2022 through April 2022 – final design
- May 2022 – bidding
- June 2022 – grant application
- August 2022 – grant award
- May through August 2023 - construction
- Stakeholder engagement – continuous through design and construction

Master Plan Next Steps

- Upcoming Stakeholder Meetings
 - Master Plan Advisory Committee – October
 - Taxiway and Building Area TAC - October
- Meeting materials and summaries continue to be posted to the project website:
<https://duluthairport.com/master-plan/>

Major Milestones to Master Plan Completion

- Report preparation
 - DAA staff review of draft report – In progress
 - SEH address comments – Oct. 1 – 15
- Presentations and approvals
 - DAA Board presentation – Oct. 19 (Topic: Financial Plan)
 - MPAC Meeting – tentative Oct. 20 (Final presentation)
 - DAA Board retreat (Dec. 2) – Detailed master plan presentation and discussion
 - DAA Board approval – Dec. 2021
 - Public Open House/Outreach events – Early 2022

Part 150 Noise Study Project Update

- FAA preliminary review of draft study – Complete 9/20

Next Steps

- Public Open House and Hearing, Nov. 2
- Public Advisory Committee – Nov. 3
- Final DAA Board Adoption – Nov. 16
- Submit final documents to FAA – Week of Nov. 22
 - FAA has up to 180 days to complete review