

Sample Preliminary Obstacle Evaluation Report

Airport-wide all-runway screening example for report review

Project	KMGM Air Traffic Control Tower Renovation - Temporary Crane Screening
Generated timestamp	2026-06-20T12:00:00Z
Airport	MONTGOMERY RGNL (DANNELLY FLD)
Airport identifier	KMGM
Evaluation scope	All runway pairs
Runway pairs evaluated	10/28, 03/21
Runway-end contexts evaluated	4
Criteria family	Civil Part 77
Initial evaluator context	10/28 - End 10
Evaluator / Company	Clear Path Demonstration Evaluation

Non-Certification Notice

This sample is a planning and screening record only. It is not FAA, DoD, airport sponsor, engineering, surveying, legal, or construction approval.

Clear Path

Executive Summary

KMGM temporary crane screening using all available runway-end contexts.

Result Summary

Overall result status	Violation
Runway contexts evaluated	4
Violation surfaces	4
Protected-zone findings	0
Not evaluated or gated surfaces	4

Violation Summary

Runway context	Surface	Criteria	Allowable	Object top	Penetration
10/28 - End 10	Civil Part 77 Horizontal Surface	Civil Part 77	371.00 ft	490.00 ft	119.00 ft
10/28 - End 28	Civil Part 77 Horizontal Surface	Civil Part 77	371.00 ft	490.00 ft	119.00 ft
03/21 - End 03	Civil Part 77 Transitional Surface (NONPrecision Instrument civil transitional)	Civil Part 77	341.52 ft	490.00 ft	148.48 ft
03/21 - End 21	Civil Part 77 Horizontal Surface	Civil Part 77	371.00 ft	490.00 ft	119.00 ft

Controlling Calculation Detail

Surface	Transitional Surface
Source	Civil Part 77 14 CFR Part 77 (up to date as of 4-13-2026) 14 CFR 77.19 77.19(e)
Distance method	Perpendicular distance from primary/approach surface edge
Distance used	926.73 ft
Measured from	Approach or approach-clearance side edge
Slope	7:1
Object height	275.00 ft
Object ground elevation MSL	215.00 ft
Runway/reference elevation	196.00 ft

Formula used	Allowable elevation = controlling edge elevation + perpendicular distance from controlling edge / 7:1.
Object top elevation formula	Object Top Elevation MSL = 215.00 ft + 275.00 ft = 490.00 ft
Allowable surface elevation formula	Allowable Surface Elevation MSL = 196.00 ft + 145.52 ft = 341.52 ft
Allowable surface elevation	341.52 ft
Actual object top elevation	490.00 ft

SAMPLE

Clear Path

Inputs and Runway Contexts

Project, object, airport, and all-runway evaluation scope.

Project Information

Project name	KMGM Air Traffic Control Tower Renovation - Temporary Crane Screening
Evaluation date	2026-07-10
Evaluator / company	Clear Path Demonstration Evaluation
Object description	Temporary construction crane supporting air traffic control tower renovation activities.
Obstacle type	Temporary Obstacle
Notes	Preliminary screening example for report review only. Verify survey, airport, runway, source data, criteria selections, and agency requirements before relying on final results.

Object and Airport Inputs

Airport name	MONTGOMERY RGNL (DANNELLY FLD)
Airport identifier	KMGM
Airport elevation	221.00 ft MSL
Object label	Temporary construction crane
Object ground elevation	215.00 ft MSL
Object height	275.00 ft AGL
Object top elevation	490.00 ft MSL
Object coordinates	32.295352, -86.398659

All-Runway Context Matrix

Context	Result	Controlling surface	Allowable	Object top	Penetration
10/28 - End 10	Violation	Civil Part 77 Horizontal Surface	371.00 ft	490.00 ft	119.00 ft
10/28 - End 28	Violation	Civil Part 77 Horizontal Surface	371.00 ft	490.00 ft	119.00 ft
03/21 - End 03	Violation	Civil Part 77 Horizontal Surface	341.52 ft	490.00 ft	148.48 ft
03/21 - End 21	Violation	Civil Part 77 Horizontal Surface	371.00 ft	490.00 ft	119.00 ft

Runway-specific inputs, result summary, and controlling violations.

Context Result

Context result	Violation
Violating surfaces	1
Clear surfaces	0
Not applicable or gated surfaces	4

Runway and Object Inputs

Airport name	MONTGOMERY RGNL (DANNELLY FLD)
Airport identifier	KMGM
Airport elevation	221.00 ft MSL
Runway pair	10/28
Runway end	10
Opposite runway end	28
Airport data source	FAA / FAA NTAD Runways
Airport data cycle	2026-03-19
Runway length	9020.00 ft
Runway width	150.00 ft

Supporting Calculation

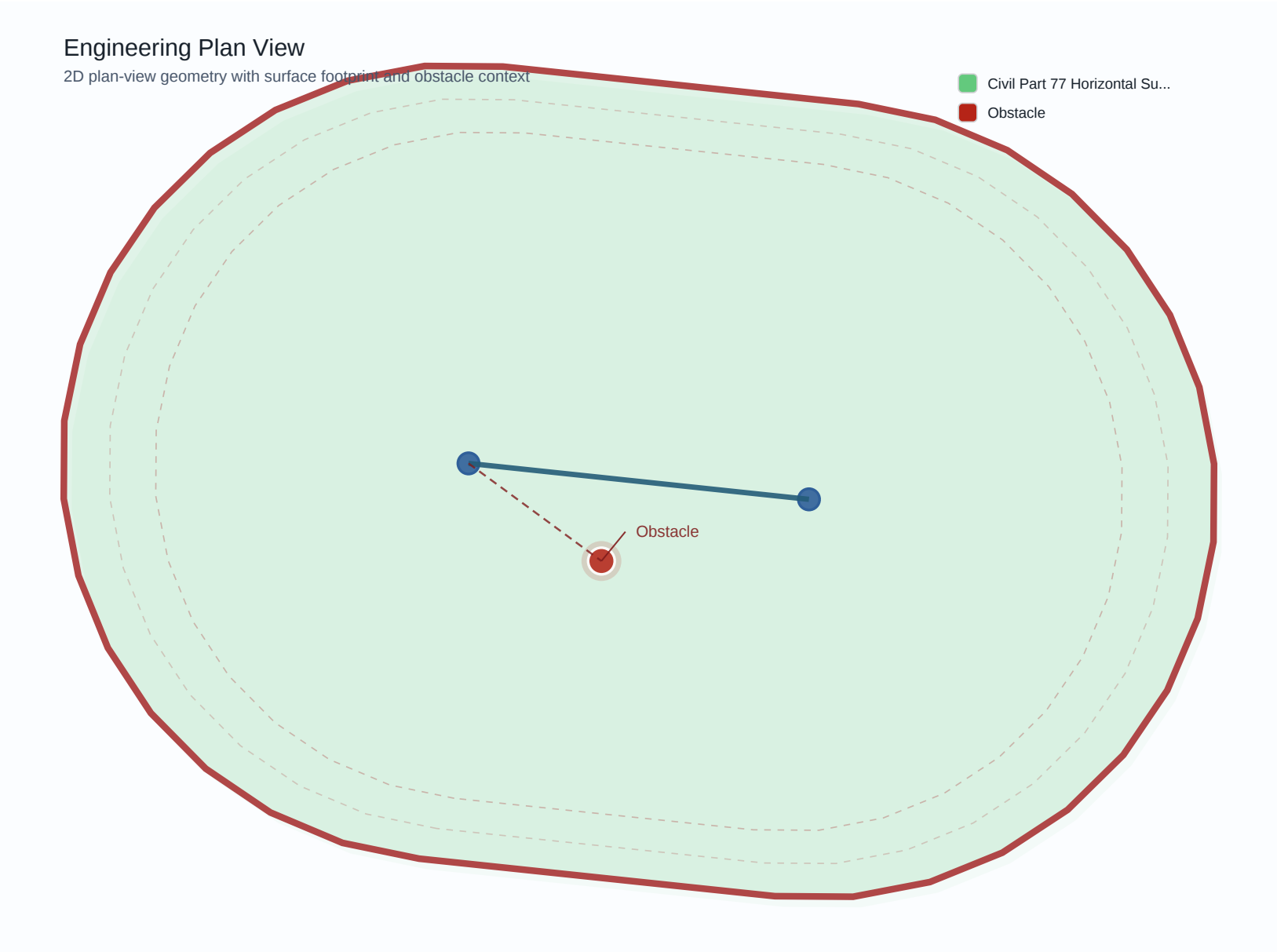
Surface	Horizontal Surface
Source	Civil Part 77 14 CFR Part 77 (up to date as of 4-13-2026) 14 CFR 77.19 77.19(a)
Distance method	Lateral distance from runway centerline
Distance used	2191.94 ft
Measured from	Primary surface edge
Slope	Flat / horizontal

Object height	275.00 ft
Object ground elevation MSL	215.00 ft
Runway/reference elevation	221.00 ft
Formula used	Allowable elevation = reference elevation + encoded vertical offset.
Object top elevation formula	Object Top Elevation MSL = 215.00 ft + 275.00 ft = 490.00 ft

SAMPLE

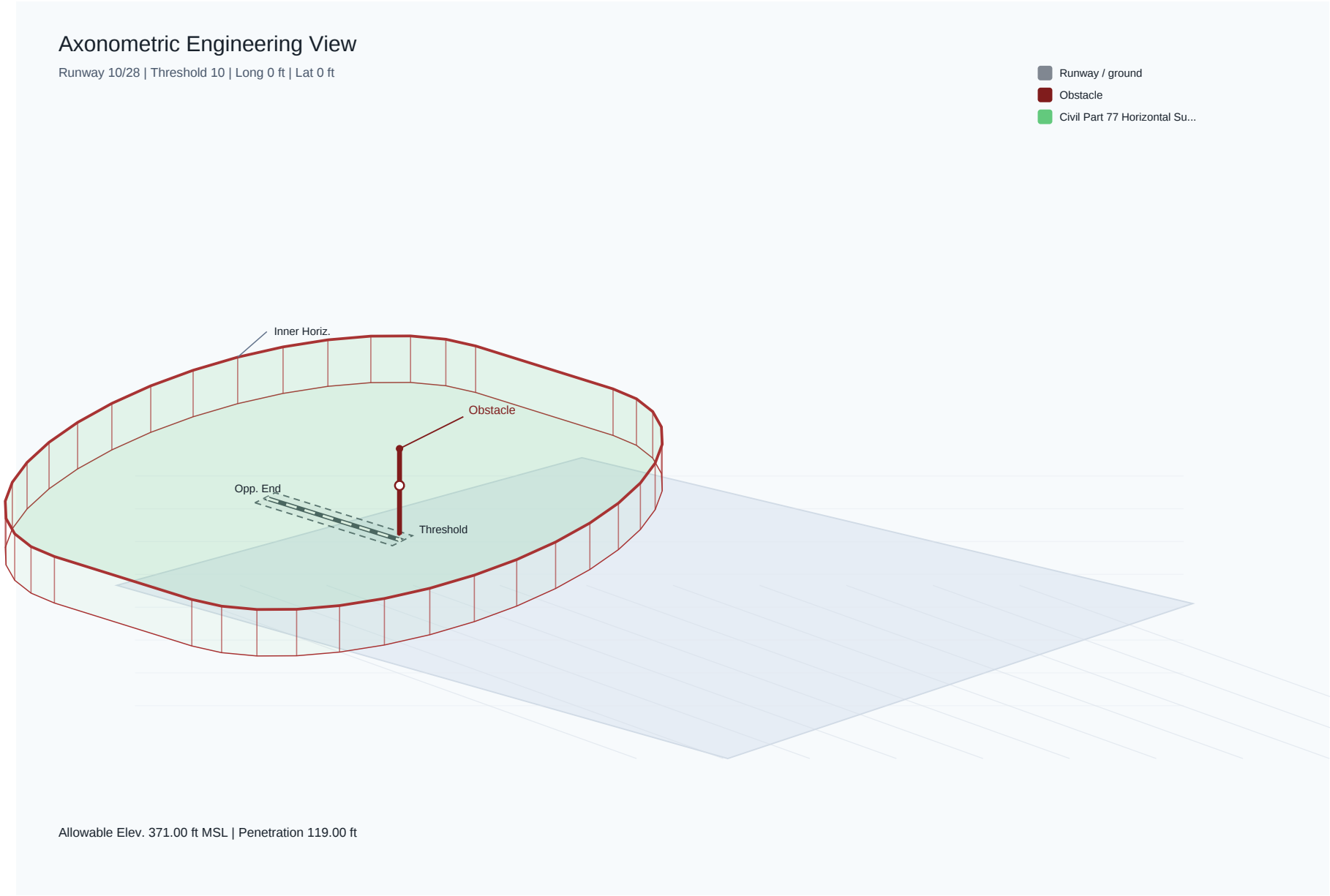
10/28 - End 10 - Engineering Plan View

2D plan-view geometry with surface footprint and obstacle context.



10/28 - End 10 - 3D Engineering View

Axonometric view of runway, obstacle, and evaluated surface relationship.



Runway-specific inputs, result summary, and controlling violations.

Context Result

Context result	Violation
Violating surfaces	1
Clear surfaces	0
Not applicable or gated surfaces	4

Runway and Object Inputs

Airport name	MONTGOMERY RGNL (DANNELLY FLD)
Airport identifier	KMGM
Airport elevation	221.00 ft MSL
Runway pair	10/28
Runway end	28
Opposite runway end	10
Airport data source	FAA / FAA NTAD Runways
Airport data cycle	2026-03-19
Runway length	9020.00 ft
Runway width	150.00 ft

Supporting Calculation

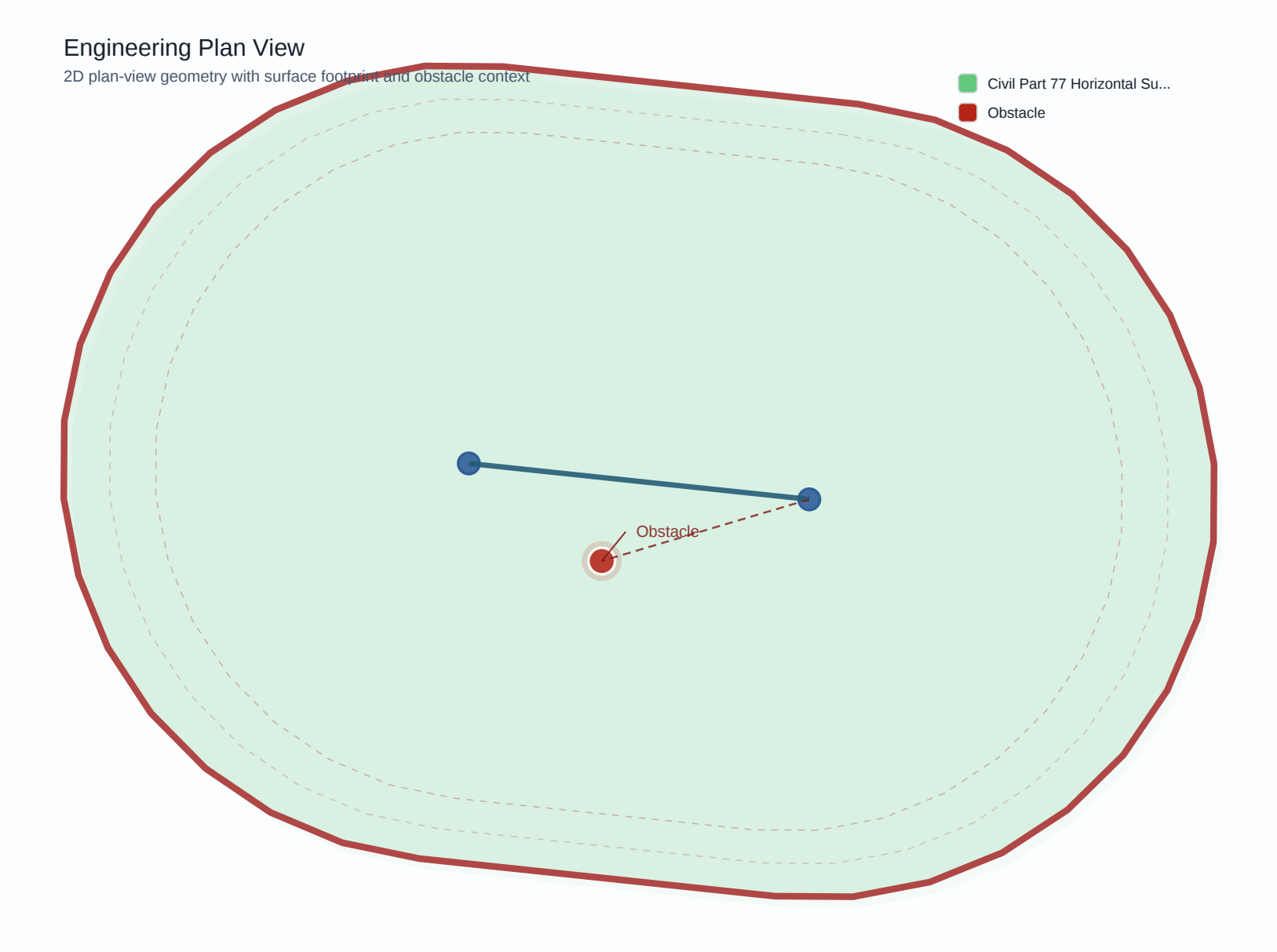
Surface	Horizontal Surface
Source	Civil Part 77 14 CFR Part 77 (up to date as of 4-13-2026) 14 CFR 77.19 77.19(a)

Object height	275.00 ft
Object ground elevation MSL	215.00 ft
Runway/reference elevation	221.00 ft
Formula used	Allowable elevation = reference elevation + encoded vertical offset.
Object top elevation formula	Object Top Elevation MSL = 215.00 ft + 275.00 ft = 490.00 ft

SAMPLE

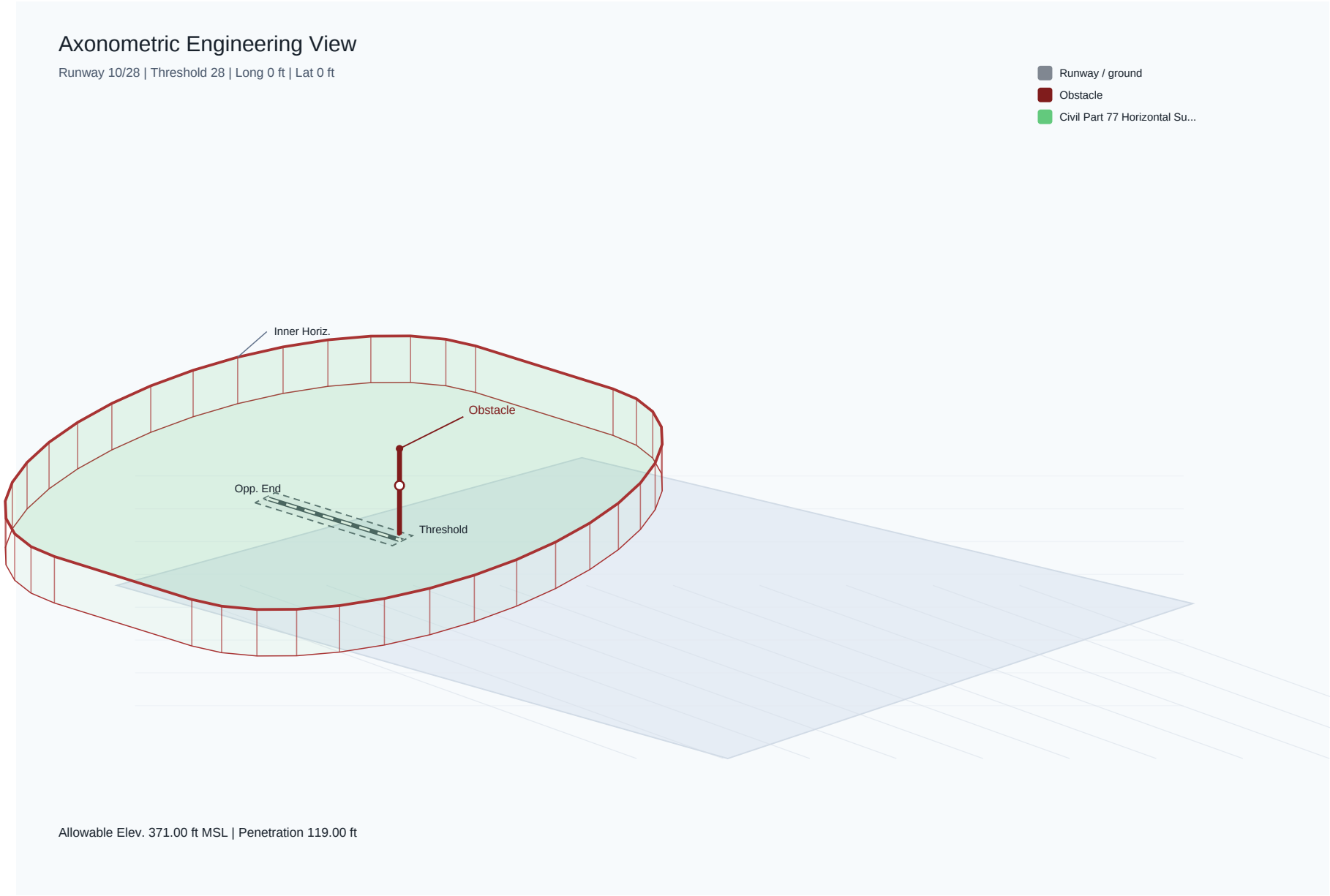
10/28 - End 28 - Engineering Plan View

2D plan-view geometry with surface footprint and obstacle context.



10/28 - End 28 - 3D Engineering View

Axonometric view of runway, obstacle, and evaluated surface relationship.



Runway-specific inputs, result summary, and controlling violations.

Context Result

Context result	Violation
Violating surfaces	1
Clear surfaces	0
Not applicable or gated surfaces	4

Runway and Object Inputs

Airport name	MONTGOMERY RGNL (DANNELLY FLD)
Airport identifier	KMGM
Airport elevation	221.00 ft MSL
Runway pair	03/21
Runway end	03
Opposite runway end	21
Airport data source	FAA / FAA NTAD Runways
Airport data cycle	2026-03-19
Runway length	4011.00 ft
Runway width	150.00 ft

Supporting Calculation

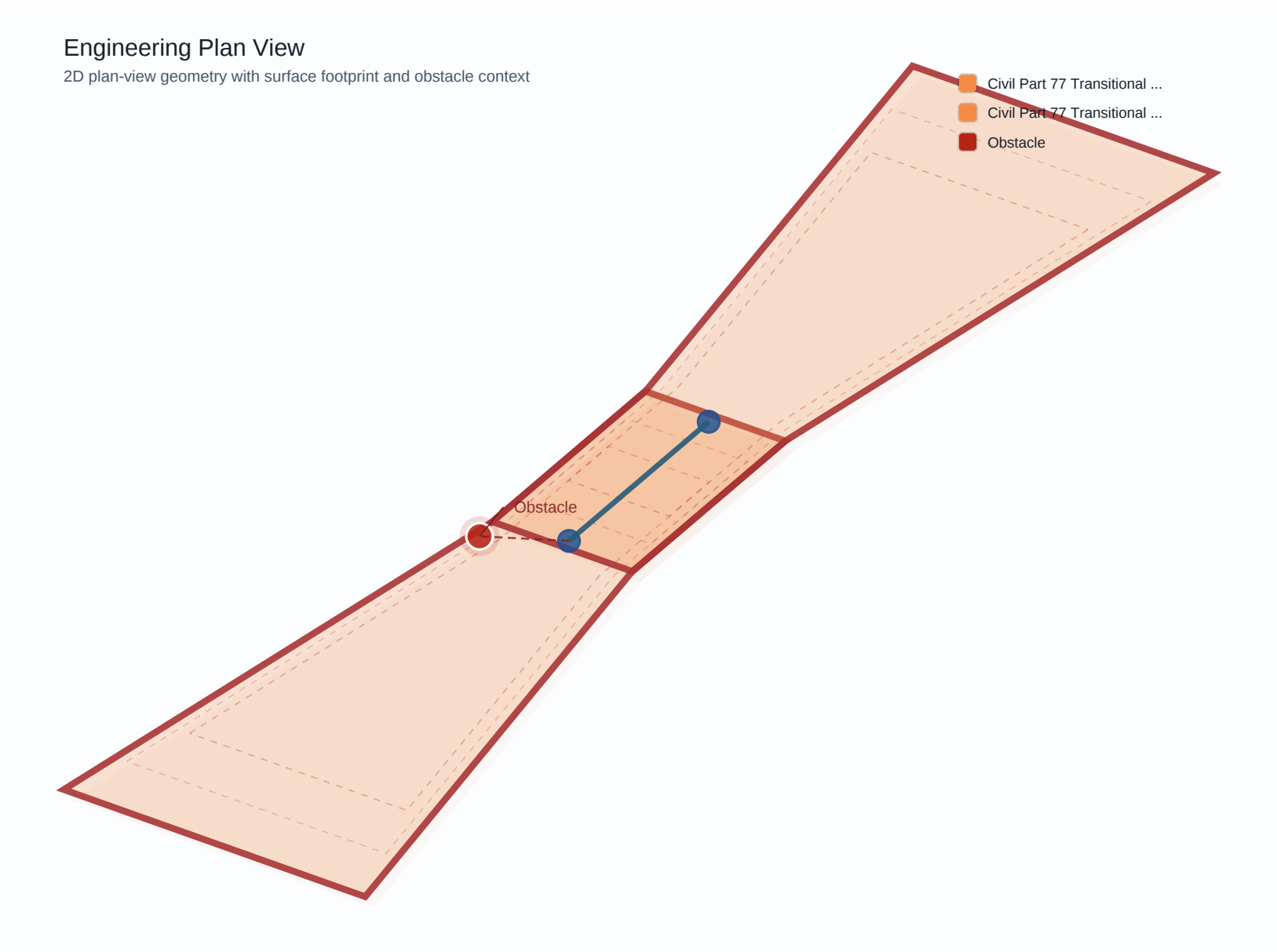
Surface	Transitional Surface
Source	Civil Part 77 14 CFR Part 77 (up to date as of 4-13-2026) 14 CFR 77.19 77.19(e)

Object height	275.00 ft
Object ground elevation MSL	215.00 ft
Runway/reference elevation	196.00 ft
Formula used	Allowable elevation = controlling edge elevation + perpendicular distance from controlling edge / 7:1.
Object top elevation formula	Object Top Elevation MSL = 215.00 ft + 275.00 ft = 490.00 ft

SAMPLE

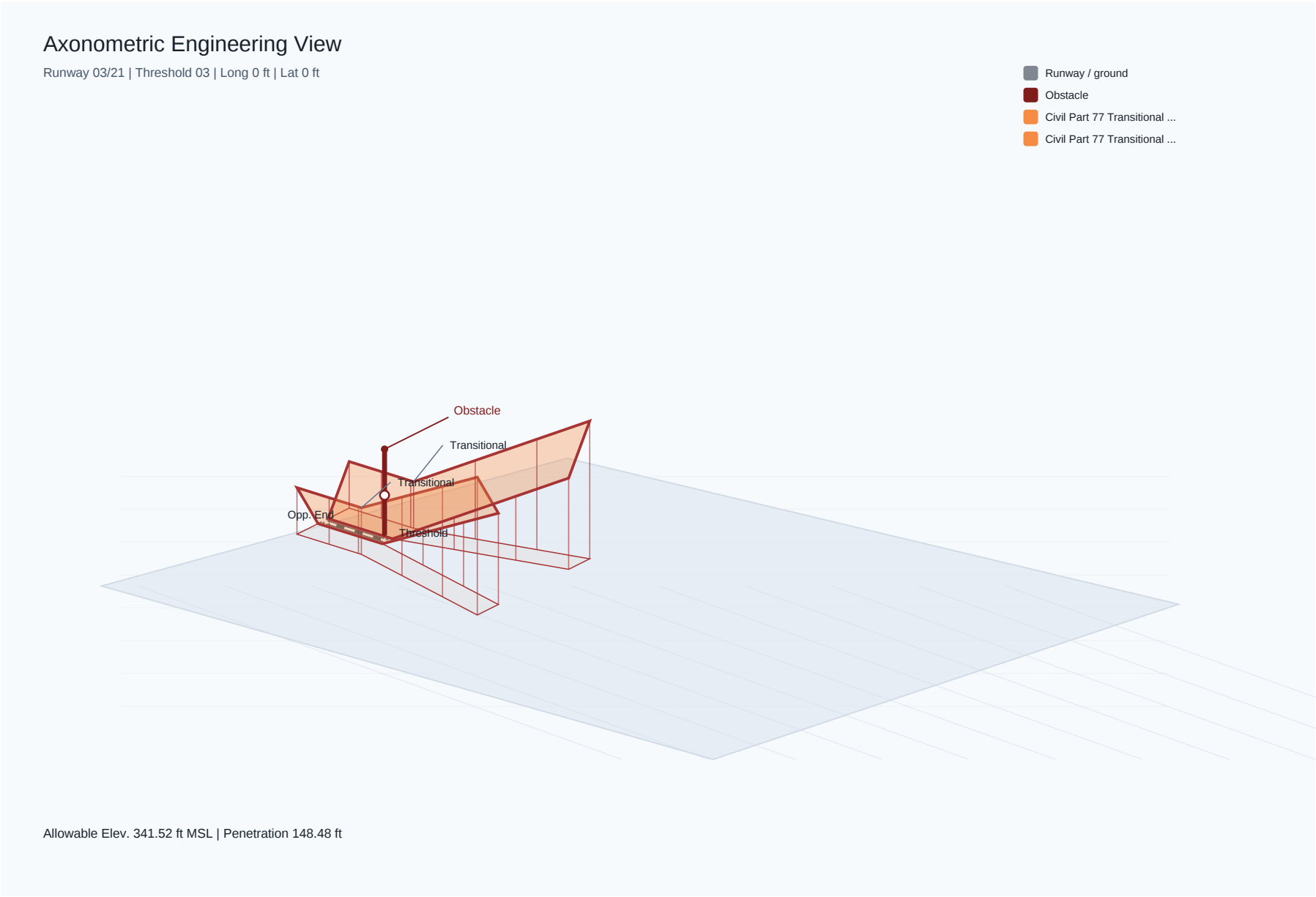
03/21 - End 03 - Engineering Plan View

2D plan-view geometry with surface footprint and obstacle context.



03/21 - End 03 - 3D Engineering View

Axonometric view of runway, obstacle, and evaluated surface relationship.



Runway-specific inputs, result summary, and controlling violations.

Context Result

Context result	Violation
Violating surfaces	1
Clear surfaces	0
Not applicable or gated surfaces	4

Runway and Object Inputs

Airport name	MONTGOMERY RGNL (DANNELLY FLD)
Airport identifier	KMGM
Airport elevation	221.00 ft MSL
Runway pair	03/21
Runway end	21
Opposite runway end	03
Airport data source	FAA / FAA NTAD Runways
Airport data cycle	2026-03-19
Runway length	4011.00 ft
Runway width	150.00 ft

Supporting Calculation

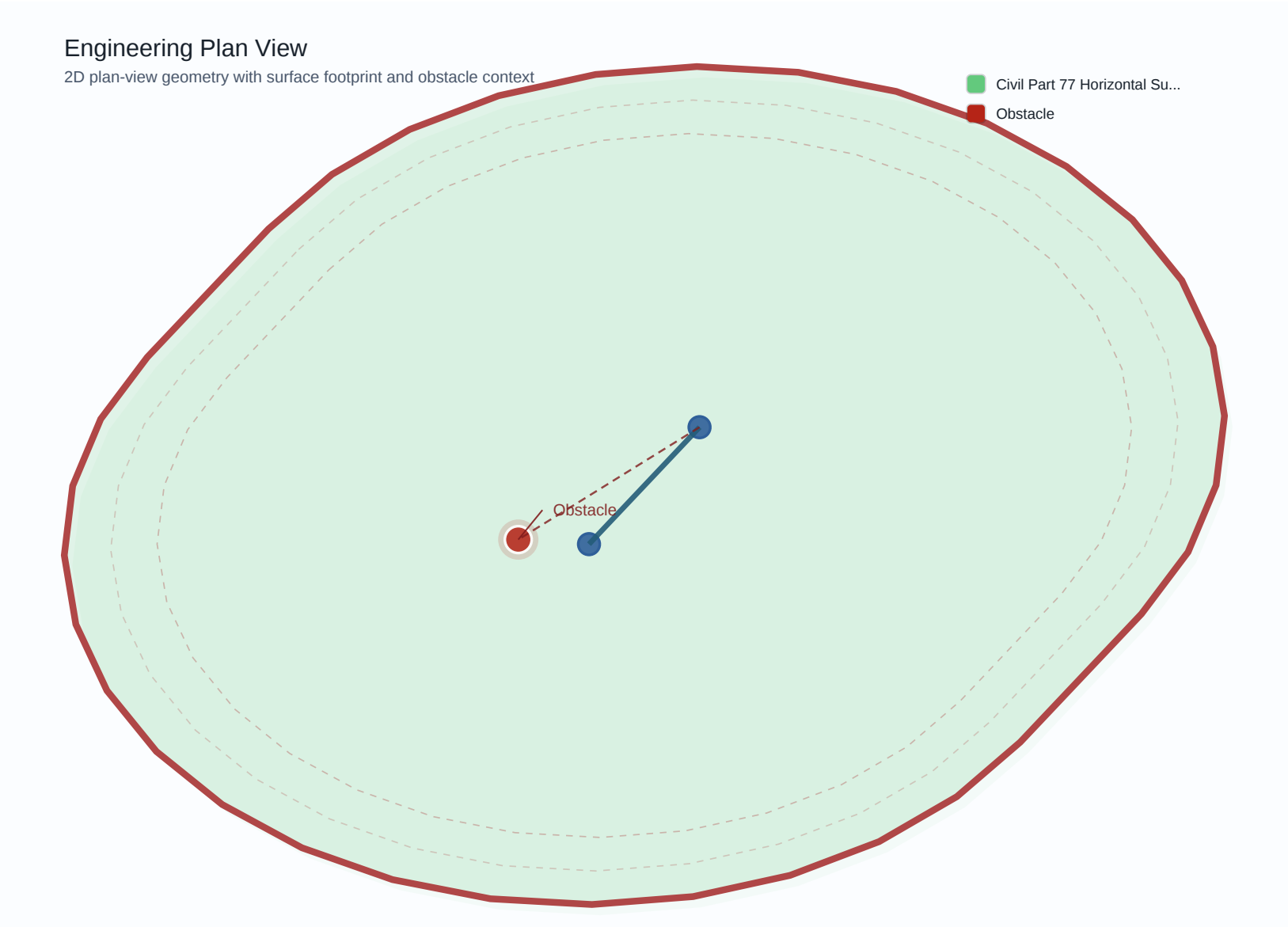
Surface	Horizontal Surface
Source	Civil Part 77 14 CFR Part 77 (up to date as of 4-13-2026) 14 CFR 77.19 77.19(a)

Object height	275.00 ft
Object ground elevation MSL	215.00 ft
Runway/reference elevation	221.00 ft
Formula used	Allowable elevation = reference elevation + encoded vertical offset.
Object top elevation formula	Object Top Elevation MSL = 215.00 ft + 275.00 ft = 490.00 ft

SAMPLE

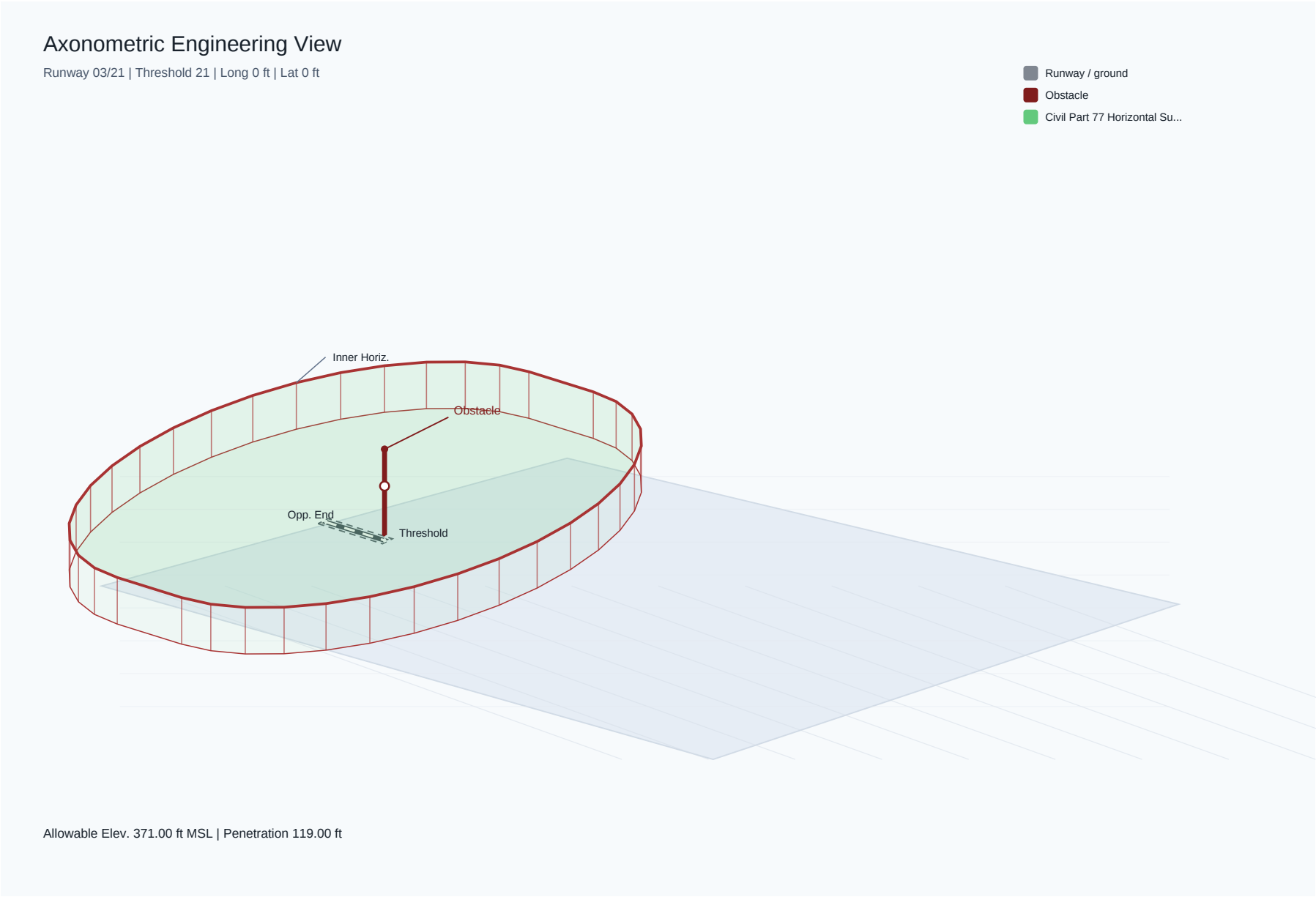
03/21 - End 21 - Engineering Plan View

2D plan-view geometry with surface footprint and obstacle context.



03/21 - End 21 - 3D Engineering View

Axonometric view of runway, obstacle, and evaluated surface relationship.



Source Basis and Limitations

Traceability, unsupported criteria callouts, and non-certification language.

Criteria Profile

Criteria family	Part 77 Fixed-Wing - Precision Instrument; Civil Part 77 - 14 CFR 77.19 civil airport imaginary surfaces
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Unsupported / Needs Review

Civil Part 77 - Civil Part 77 Approach Surface (Not Applicable)	Precision approach uses a first 10,000 ft segment at 50:1 and a subsequent 40,000 ft segment at 40:1. 14 CFR 77.19 civil airport imaginary surfaces
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Source References

Known Limitations

Preliminary use: Clear Path reports are planning and screening records, not FAA, DoD, airport-sponsor, engineering, surveying, or legal approvals.

Preliminary use: Users remain responsible for verifying inputs, source data, criteria selection, assumptions, and outputs before design, permitting, siting, construction, or formal submission decisions.

Coverage limits: Unsupported, dependency-gated, Not Evaluated, and Needs Review criteria are not final obstruction determinations.

Coverage limits: Manual, overridden, or incomplete airport/runway data can materially affect result reliability.

Coverage limits: Heliport, rotor-wing, and other unsupported criteria are not evaluated unless a rule pack explicitly encodes them.

Non-Certification Notice

Clear Path is designed to evaluate submitted inputs against the published criteria implemented in the software for planning, design review, internal quality control, and operational decision-making workflows. Results are not official FAA, DoD, airport sponsor, engineering, surveying, or legal determinations.

References to FAA, DoD, UFC, Part 77, airport criteria, or source documents identify evaluation inputs only and do not imply endorsement, sponsorship, authorization, or official status by any agency, command, military unit, or airport authority.

Results depend on user-provided data, selected criteria, available source logic, and known limitations in the current release.

Final filing, approval, and enforcement authority remains with the applicable FAA, DoD, airport sponsor, or other authority having jurisdiction. Users are responsible for verifying all inputs, assumptions, criteria, and outputs before relying on results for formal submissions.