

ATMP Engineering Standards Revisions

City of Flagstaff

Round 1 revisions | Adopted April 16, 2024

<i>Change</i>	<i>Summary</i>	<i>Code sections</i>	<i>Next steps</i>
Bicycle Exit / Entrance Ramp Detail	Adds detail for a bicycle exit / entrance ramp.	13-23: 10-10-035 Detail	--
Bicycle facilities	Deletes the reference to MetroPlan's Pedestrian and Bicycle Design Guide, added a reference to AASHTO Guide for the Development of Bicycle Facilities.	13-14-001-0001	--
Bus pullout detail	Adds text to detail to specify that FUTS trails shall be aligned behind bus shelters.	13-23: 10-10-019 Detail	--
Traffic control plans	Clarifies that traffic control plans are required when sidewalks, bikeways, or FUTS trails are temporarily closed or affected by construction or maintenance activities.	13-06-008-0001	--
	Requires traffic control plans to address pedestrian and bicycle accommodation through construction zones, including temporary reroutes.	13-06-008-0002	--
	Requires traffic control plans to depict accessible routes through construction zones that comply with ADA.	13-06-008-0002	--
Driveway-Pedestrian Ramp Combination	Deletes detail for combined driveway/pedestrian ramp.	13-23: 10-10-039 Detail	--
Obstructions	Requires location of signal poles, pedestrian push buttons, and street lights to be outside of sidewalks, bikeways, FUTS trails, accessible routes, and curb ramps. Specifies that these facilities should maintain full width and not be narrowed.	13-16-002-0002	--
	Requires location of traffic signs outside of sidewalks, bikeways, FUTS trails, and curb ramps.	13-16-005-0001	--
Manhole and valve placement	Specifies that manholes should be located outside of sidewalks, bikeways, bike lanes, and FUTS trails when feasible.	13-09-002-0006	--
	Specifies that valves should be located outside of sidewalks, bikeways, bike lanes, and FUTS trails when feasible.	13-09-003-0005	--
Ped and bike facilities chapter	Changes the title of this chapter from BICYCLE FACILITIES to FUTS TRAILS, PEDESTRIAN AND BICYCLE FACILITIES	13-14	--
Pedestrian and Bicycle Facilities	Adds a new division for pedestrian and bicycle facility standards.	13-14-001	--
FUTS standards	Adds a new division for FUTS standards.	13-14-002	--
	Adds a requirement that FUTS trails be designed and built in conformance with AASHTO Guide for the Development of Bicycle Facilities.	13-14-002-0001	--

	Adds a series of dimensional requirements for FUTS trails, including width, shoulders, parkways, horizontal and vertical clearance, grades, cross slopes, design speeds, and horizontal and vertical curves.	13-14-002-0002	--
	Adds a new section to describe requirements for FUTS structural sections, or how FUTS trails should be built. Text removed from the standard detail was added here.	13-14-002-0003	--
	Adds a new section for expansion and control joints along FUTS trails.	13-14-002-0004	--
	Adds a new section with materials standards for FUTS shoulders.	13-14-002-0005	--
	Adds a new section to describe transitions between FUTS trails, sidewalks, other trails, and streets.	13-14-002-0006	--
	Adds a new section that references AASHTO for requirements for FUTS fencing.	13-14-002-0007	--
	Adds a new section that describes minimum height and width for FUTS trails. The minimum width is a sliding scale based on the length of tunnel.	13-14-002-0008	--
	Adds a detail for a collapsible bollard to be used on FUTS trails.	13-23: 13-03-015 Detail	--
	Deletes FUTS details for paved trails, aggregate trails, fencing, aggregate materials (replaced with new details).	13-23: 14-01-010 Detail	--
	Removes pedestrian underpass detail (dimensional requirements added as text to 13-14).	13-23: 14-01-011 Detail	--
	Adds new detail for paved FUTS trails.	13-23: 14-02-001 Detail	--
	Adds new detail for aggregate FUTS trails. Includes table with new gradation specs. Removes requirement for lignin.	13-23: 14-02-002 Detail	
	Adds detail for expansion and contraction joints on FUTS trails.	13-23: 14-02-005 Detail	--
	Adds detail for FUTS fencing and post caps.	13-23: 14-02-010 Detail	--
Rapid flashing beacons	Updates standard detail for pedestrian rapid flashing beacons.	13-23: 16-04-010 Detail	--
Striping/markings	Indicates that longitudinal pavement markings comply with MUTCD.	13-16-006-0001	--
	Indicates that transverse pavement markings, symbols, and legends comply with MUTCD.	13-16-006-0002	--
	Updates details for bike lane and crosswalk striping.	13-23: 16-06-010 Detail	--
Traffic control plans	Clarifies that traffic control plans are required when sidewalks, bikeways, or FUTS trails are temporarily closed or affected by construction or maintenance activities.	13-06-008-0001	
	Requires traffic control plans to address pedestrian and bicycle accommodation through construction zones, including temporary reroutes.	13-06-008-0002	--

	Requires traffic control plans to depict accessible routes through construction zones that comply with ADA.	13-06-008-0002	--
Proposed Round 2 Revisions			
<i>Change</i>	<i>Summary</i>	<i>Code sections</i>	<i>Next steps</i>
Bicycle detection	Include language to require detection of bicycles at traffic signals.	13-16-003-0010 A	2 Research state of the practice 2 Review current technologies 3 Internal discussion
Curb ramps/ped signals	Revise language and detail for curb ramps and pedestrian push buttons to comply with new PROWAG guidelines, including APS (Accessible Pedestrian Signal) standards.	13-16-002-0002 13-16-003-0010 C 13-16-005-0002 A 13-23: 10-10-034 Detail	2 Review new PROWAG and MUTCD guidance 3 Internal review 4 PAC - TC - CIAL review
Easement language	Review draft / add new language for FUTS and public access easements in Subdivision Code	13-04-001-0003	1 Review draft easement language
Longitudinal sawcuts in bike lanes	Clarify requirement that sawcut lines be made at the bike lane line rather than in the middle of bike lanes.	13-06-007-0003 A-B 13-10-009-0001 13-15-001-0001	1 Review affected sections for coordination 1 Draft revised language
Rapid flashing beacons	Revise detail to include geometric and dimensional details for RFBs, including minimum island width/length, crossing geometry, and minimum walkway widths.	13-23: 16-04-010 Detail	2 Research state of the practice 3 Internal review 4 PAC - BAC - TC - CIAL review
	Add a detail for crossings on two lane streets, with and without median islands, that allow pedestrians to cross the entire width at once.	13-23: 16-04-010 Detail	
	Add a detail with geometric and dimensional details for different types of median island crossings, including zee, angle, and straight crossings.	13-23: 16-04-010 Detail	
Right turn lanes	Revise right turn lane detail to remove short acceleration lane on far side of dedicated right turn lanes, depict sidewalk alignment.	13-23: 10-10-020 Detail	1 Draft revised detail
Rolled curb	Expand areas where rolled curb can be used to include single-family subdivisions with lot widths of 50 feet or less, in addition to townhouse development.	13-10-002-01 Table	2 Research state of the practice 3 Internal discussion 4 PAC - TC - CIAL review
Street cross sections	Reduce through lane width from 12 to 11 feet. Eliminate 12-foot lane width and 30-foot radius for truck routes.	13-10-002-01 Table	2 Research state of the practice 3 Internal discussion 4 TC review
	Decrease sidewalk and parkway width from 5 to 4 feet for Residential Local Wide and Residential Local streets.	13-10-002-01 Table	2 Research state of the practice 3 Internal discussion 4 PAC - TC - CIAL review
	Increase sidewalk width from 5 to 6 feet on Major Collector streets.	13-10-002-01 Table	2 Research state of the practice 3 Internal discussion 4 PAC - TC - CIAL review

	Increase bicycle lane width from 4 to 6 feet for Rural Major Arterial, Minor Arterial, Major Collector, and Minor Collector Streets.	13-10-002-01 Table	1 Draft revised detail
	Develop arterial and collector cross section drawings for two lane roads - standard details currently only show four lane sections		1 Draft revised detail
	Clarify situations or circumstances where parkways can be waived; add requirements for mitigations, like a wider sidewalk, when parkways are waived.	13-10-011-01 Table	2 Research state of the practice 3 Internal discussion
Turn out detail	Revise detail to show a short, paved section where unpaved driveways connect to public streets.	13-23: 10-10-031 Detail	1 Draft revised detail

Process steps...
1 Draft revisions
2 Research state of the practice
3 Internal discussion/review
4 Commission/committee review

Proposed Round 3 Revisions

<i>Change</i>	<i>Summary</i>	<i>Code sections</i>	<i>Next steps</i>
MAG standards	Review MAG standards for applicability and conformance to ATMP, Housing Plan, and Carbon Neutrality Plan.	13-01-002-0001 A.2	
Agency controls and reviews	Review outside documents referenced in this section to better resolve "apply when applicable" condition.	13-01-002-0001 B	
Transportation impact analysis	Revise TIA process to allow pedestrian, bicycle, and transit improvements as mitigation and to consider transportation impact fees in lieu of mitigation requirements. Review process for consistency and reasonableness.	13-05-002-0003	
Alleys	Reconsider standards and cross sections for alleys.	13-10-005-0001 A-B	
Driveways and private streets	Establish clear definitions to differentiate driveways from private streets; draft appropriate standards for each.	13-10-010-0001	
Fire access standards	Evaluate impact of Fire Safety Standards on street design and pedestrian and bicycle accommodation.	13-13-004 13-10-011-01 Table	
FUTS standards	Consider next round of standards revisions for FUTS trails, including drainage features.	13-14-002	
Level of service	Incorporate level of service guidance to eliminate reliance on ADOT standards and allow more thoughtful application.		
Street cross sections	Comprehensive review of current street cross section standards.	13-10-011-01 Table	
Traditional Neighborhood Design street standards	Consolidate TND street standards into typical street standards to create one set of standards.	13-10-012	
Bike lanes and bikeways	Develop standards and details for a variety of new bikeway facility types, such as buffered bike lanes, separated bikeways, and protected intersections; review dimensions and applicability of conventional bike lanes in current standards.	13-10-011-01 Table 13-14-001	

Sidewalks and pedestrian realm	Revise standards to reflect zones of the pedestrian realm - buffer, furnishing, through, and frontage zones; review sidewalk and parkway widths and applicability in current standards.	13-10-011-01 Table 13-14-001
On-street parking	Consider adding on-street parking to arterial and collector streets; review current standards for on-street parking on residential streets.	13-10-011-01 Table
Context	Expand the use of context in standards for cross sections, geometry, and networks; use the Regional Plan to define and map urban, suburban, and rural contexts, and activity centers.	
Street geometry	Comprehensive review of street geometry standards, beginning with a consideration of appropriate design/target/posted speeds by context and functional class.	13-10-011-01 Table
Street network	Review of standards and guidance for street networks, including the hierarchy of locals, collectors, and arterials, street patterns, grid spacing, and cul-de-sac, and connectivity.	13-10-002-0001
Traffic calming	Review and revise current standards and guidance for traffic calming practices and techniques.	13-10-011-02 Table
Turn lanes and pullouts	Review warrants and practices for right turn lanes, left turn lanes and dual lefts, and bus pull outs, consider impacts on walking and biking, incorporate context considerations.	13-10-010-0002