



Policy on Accessible Pedestrian Facilities



Adopted with Resolution 2019-065 on December 03, 2019

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

TABLE OF CONTENTS

1. GENERAL PROVISIONS

1.1 Purpose and Intent

1.1.A Pedestrian Rights

1.1.B Universal Design

1.2 Definitions

1.2.A Undefined Terms

1.2.B Defined Terms

1.2.C Acronyms

1.3 Application

1.3.A Public Funds

1.3.B By Others

1.3.C Policy Effective Date

1.3.D.i Non-Continuous Work

1.3.D.i.a Exception

1.4 Governing Standards

1.4.A Applicability in the PROW

1.4.B Minimum Requirements

1.4.B.i City Authority

1.4.C Order of Precedence

1.4.C.i Difference Between Requirements

1.4.C.ii General and Specific Requirements

1.4.C.iii No Explicit Standard

1.4.D Design Requirements

1.4.D.i Plan Review

1.4.D.i.a Mandatory Construction Note

1.4.D.ii Design Tolerances

1.4.D.ii.a Minimum Clear Width

1.4.D.ii.b Maximum Slope

1.4.E Construction and Manufacturing Tolerances

1.4.F Quality Requirements

1.4.G Measurement

1.4.H Equivalent Facilitation

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

2. IMPROVEMENTS

2.1 New Construction

- 2.1.A Americans with Disabilities Act
- 2.1.B California Government Code
- 2.2.C Project Scope
 - 2.2.C.i Frontage Improvements
 - 2.2.C.i.a Location
 - 2.2.C.i.b Scope
 - 2.2.C.ii Subdivision Improvements
 - 2.2.C.ii.a Maximum Connectivity
- 2.1.D Project-Specific Design

2.2 Alterations

- 2.2.A Americans with Disabilities Act
 - 2.2.A.i Alterations of Multiple Single Elements
- 2.2.B Project Scope
 - 2.2.B.i Frontage Improvements
 - 2.2.B.i.a Location
 - 2.2.B.i.b Scope
 - 2.2.B.ii Subdivision Improvements
 - 2.2.B.ii.a Maximum Connectivity
- 2.2.C Timing of Improvements
- 2.2.D Project-Specific Design
- 2.2.E Reduction in Access is Prohibited
- 2.2.F Technical Infeasibility
 - 2.2.F.i Compliance to the Maximum Extent Feasible
 - 2.2.F.i.a Accessible in Part
 - 2.2.F.i.b Accessible to Persons with Other Disabilities
 - 2.2.F.ii Application for Finding of Technical Infeasibility
 - 2.2.F.ii.a Review
 - 2.2.F.ii.b Qualifications
- 2.2.G Transitions to Non-Compliant Improvements
 - 2.2.G.i Location of Transition Segment
 - 2.2.G.i.a Street Corners
 - 2.2.G.ii Technical Requirements of Transition Segment

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

2.2.G.ii.a Running Slope

2.2.H Alteration of Accessible Routes

2.2.H.i Non-Compliant Adjoining Facilities

2.2.H.i.a Accessible Sidewalks

2.2.H.i.b Accessible Curb Ramps

2.2.H.i.c Accessible Crosswalks

2.2.H.ii Exception

2.2.I Alteration of Roadways

2.2.I.i Examples

2.2.I.ii Alteration of Crosswalks

2.2.I.ii.a Trench Repair

2.2.I.ii.a.i Maintenance

2.2.I.ii.a.ii Alteration

2.2.I.iii Provision of Pedestrian Facilities

2.2.I.iii.a Curb Ramps

2.2.J Alteration of Traffic Control Devices

2.2.J.i Minor Alterations of Traffic Signals

2.2.J.i.a Examples

2.2.J.ii Major Alterations of Traffic Signals

2.2.J.ii.a Examples

2.2.J.iii Emergency Traffic Signal Alterations

2.2.K Alteration of Signage and Striping

2.2.K.i Stop Sign Installation

2.2.K.i.a No Existing Yield Condition

2.2.K.i.b Existing Yield Condition

2.2.K.ii Addition of a Marked Crosswalk at an Intersection

2.2.K.iii Addition of a Mid-Block Crosswalk

2.2.K.iv Emergency Signage Alterations

2.3 Non-Compliant Unaccepted Improvements

2.3.A Unaccepted Improvements

2.3.B Required Improvements

2.4 Maintenance

2.4.A Overview

2.4.B Several Maintenance Treatments Are An Alteration

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

2.4.C Street and Roadway Maintenance

2.4.C.i Examples

2.4.D Traffic Signal Maintenance

2.4.D.i Examples

2.4.D.ii Replacement of all PPB at an Intersection

2.4.E Signage and Striping Maintenance

2.4.E.i Examples

3. SCOPING AND TECHNICAL REQUIREMENTS

3.1 Temporary Traffic Control

3.1.A Safe and Accessible Pedestrian Access

3.1.A.i Alternate Route

3.1.A.i.a Technical Requirements

3.1.A.ii Prior to the Start of Work

3.1.A.iii Notification

3.1.B Barriers

3.1.C Work Vehicle Movement

3.2 Walking Surfaces

3.2.A Walking Surfaces

3.2.A.i Water Pooling

3.2.A.ii Surface Materials

3.2.A.ii.a Aggregate Materials

3.2.A.ii.b Individual Paving Units

3.2.A.ii.c Stamped Surfaces

3.2.B Openings

3.2.B.i Pull Boxes and Manhole Lids

3.2.C. Expansion and Construction Joints

3.2.C.i Control or Weakened Plane Joints

3.3.D. Changes in Level

3.2.D.i Warning Curbs

3.3.D.i.a Tripping Hazard

3.3.D.i.b Exception

3.3 Sidewalks and Walks

3.3.A Scoping

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

3.3.A.i Orphaned and Discontinuous Sidewalks and Walks

3.3.A.i.a Remediation

3.3.A.i.a.i Where There is No Feasible Sidewalk Connection

3.3.B Technical Requirements

3.3.B.i Water Pooling

3.3.B.ii Minimum Clear Width

3.3.B.ii.a Sidewalks and Walks

3.3.B.ii.b Paved Border Surfaces Adjacent to Vehicular Roadways

3.3.B.iii Passing Spaces

3.3.B.iii.a Maneuvering Areas

3.3.B.iii.b Width Transitions

3.3.B.iv Location of Obstructions

3.3.B.v Width Transitions

3.3.B.vi Slopes

3.3.B.vi.a Running Slope

3.3.B.vi.b Cross Slope

3.3.B.vi.c Gutter Slopes

3.3.B.vii Surface Grinding or Bushing

3.3.C Continuous Sidewalk Across Alleys, Driveways, and Private Streets

3.3.C.i Configuration

3.3.C.i.a Non-Curb Adjacent

3.3.C.i.b Curb Adjacent

3.3.C.i.c Width

3.3.C.ii Slopes

3.3.C.ii.a Maneuvering Areas

3.3.C.ii.b Detectable Warning Surfaces

3.4 Shared Use Paths and Other Improved Pedestrian Paths

3.4.A Scoping

3.4.B Technical Requirements

3.4.B.i Surface

3.4.B.i.a Aggregate Materials

3.4.B.i.a.i Crushed Miscellaneous Base

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

- 3.4.B.ii Width
- 3.4.B.iii Slopes
- 3.4.B.iv Signage and Markings

3.5 Obstructions and Protruding Objects

- 3.5.A Scoping
 - 3.5.A.i Location of Elements
 - 3.5.A.ii Landscaped Area
- 3.5.B Technical Requirements
 - 3.5.B.i Horizontal Clearance
 - 3.5.B.i.a Undetectable Projections
 - 3.5.B.i.b Detectable Projections
 - 3.5.B.ii Vertical Clearance
 - 3.5.B.ii.a Pedestrian Routes
 - 3.5.B.ii.b Accessible Parking
 - 3.5.B.iii When Minimum Clearance is Not Provided
 - 3.5.B.iv Specific Obstructions
 - 3.5.B.iv.a Guy Wires and Braces
 - 3.5.B.iv.a.i Angled Guy Supports
 - 3.5.B.iv.a.i.1 Remediation
 - 3.5.B.iv.a.ii Vertical Guy Braces
 - 3.5.B.iv.b Mailboxes
 - 3.5.B.iv.b.i Cluster Mailboxes

3.6 Maneuvering Areas

- 3.6.A Scoping
 - 3.6.A.i Intersection Corners
 - 3.6.A.ii Crosswalks
 - 3.6.A.ii.c Gutters
 - 3.6.A.iii Passing Spaces
 - 3.6.A.iv Intersecting Sidewalks or Walks
 - 3.6.A.v Setbacks at Driveway, Alley, and Private Street Crossings
 - 3.6.A.vi Bus Stops and Loading Zones
 - 3.6.A.vii Meandering Sidewalks
- 3.6.B Technical Requirements
 - 3.6.B.i Location and Configuration of Maneuvering Areas

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

3.6.B.i.a Crosswalks

3.6.B.i.a.i Gutters

3.6.B.ii Size

3.6.B.iii Slopes

3.7 Curb Transitions

3.7.A Scoping

3.7.A.i Curb Transitions at New or Altered Streets

3.7.A.ii Curb Transitions at New or Altered Pedestrian Walks

3.7.A.iii Curb Transitions at Unprepared Surfaces

3.7.A.iii.a Signalized Intersection

3.7.A.iii.b Unsignalized Intersection

3.7.A.iv Types of Curb Ramps and Transitions

3.7.A.iv.a Directional Perpendicular Curb Ramps

3.7.A.iv.b Directional Non-Perpendicular Ramps

3.7.A.iv.c Skewed Perpendicular Curb Ramps

3.7.A.iv.c.i Maneuvering Area

3.7.A.iv.d Shared or Diagonal Curb Ramps

3.7.A.iv.d.i Exception

3.7.A.iv.e Blended Transitions

3.7.A.iv.f In-Line Transitions

3.7.A.iv.g Center Medians and Islands

3.7.B Priority of Curb Transition Design

3.7.C Technical Requirements

3.7.C.i Water Pooling

3.7.C.ii Curb Ramps

3.7.C.ii.a Location

3.7.C.ii.b Landing

3.7.C.ii.b.i Depth and Width

3.7.C.ii.b.ii Slopes

3.7.C.ii.c Curb Ramp Run

3.7.C.ii.c.i Width

3.7.C.ii.c.i.1 Shared Use Path or Other Improved Pedestrian Path

3.7.C.ii.c.i.2 Bordered By a Curb

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

3.7.C.ii.c.ii Slopes

3.7.C.ii.c.ii.1 Grade Breaks

3.7.C.ii.c.ii.2. Grade Brakes on Directional Non-Perpendicular Curb Ramps

3.7.C.ii.d Flares

3.7.C.ii.d.i Location

3.7.C.ii.d.ii Slopes

3.7.C.ii.e Gutters

3.7.C.ii.e.i Slopes

3.7.C.ii.e.ii Adjacent Surfaces at Transitions

3.7.C.ii.f Detectable Warning Surface

3.7.C.iii Blended Transitions

3.7.C.iii.a Width

3.7.C.iii.b Slopes

3.7.C.iii.c Landing

3.7.C.iii.d Detectable Warning Surface

3.7.C.iv In-Line Transitions

3.7.C.iv.a Slopes

3.7.C.iv.b Turning Space

3.7.C.iv.b.i Size

3.7.C.iv.b.ii Slopes

3.7.C.iv.c Detectable Warning Surface

3.7.C.v Center Medians and Islands

3.7.C.v.a Specifications

3.7.C.v.a.i Width

3.7.C.v.a.i Slopes

3.7.C.v.b Detectable Warning Surface

3.8 Crossings and Crosswalks

3.8.A Overview

3.8.B Scoping

3.8.B.i Crosswalks at Intersections

3.8.B.i.a Crosswalks Leading to Unprepared Surfaces

3.8.B.i.a.i Signalized Intersection

3.8.B.i.a.ii Unsignalized Intersection

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

3.8.B.ii Crosswalks at Midblock

3.8.B.iii Pedestrian Crossing Restrictions

3.8.B.iii.a New Crosswalks and Crossings

3.8.C Technical Requirements

3.8.C.i Width

3.8.C.i.a Marked Crosswalks

3.8.C.i.b Unmarked Crosswalks and Crossings

3.8.C.i.c Crossings at Shared Use Paths or Other Improved
Shared Pedestrian Paths

3.8.C.ii Slopes

3.8.C.ii.a Running Slope

3.8.C.ii.b Cross Slope

3.8.C.ii.b.i Maneuvering Areas Within Crosswalks

3.8.C.ii.b.ii Marked Crosswalks with Changes in Direction

3.8.C.iii Striping

3.8.C.iii.a Crosswalks at Intersections

3.8.C.iii.b Marked Crosswalks

3.8.C.iv Obstructions

3.9 Detectable Warning Surfaces

3.9.A Specifications

3.9.A.i Type

3.9.A.ii Color

3.10 Pedestrian Push Buttons

3.10.A Specifications

3.10.A.i PPB Operation

3.10.A.i.a Remediation of Non-Compliant PPB

3.10.A.ii Height

3.10.A.iii Location

3.10.A.iii.a PPB Distance from Curb Face

3.10.A.iii.a.i Exception

3.10.A.iii.b PPB Distance from Crosswalk

3.10.A.iii.b.i Mid-Block Crosswalks

3.10.A.iii.c PPB Spacing from Other PPB

3.10.A.iii.c.i Duplicate and Redundant PPB

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

3.10.A.iii.c.ii PPB for Different Directions of Travel

3.10.A.iii.c.ii.1 PPB for Different User Groups

3.10.A.iii.c.iii PPB for a Single Direction of Travel

3.10.A.iii.c.iii.1 PPB for Different User Groups

3.10.A.iv Orientation

3.10.A.v Clear Ground Space

3.10.A.v.a Approach

3.10.A.v.a.i Forward Approach

3.10.A.v.a.i.1 Distance Between PPB and Clear
Ground Space

3.10.A.v.a.i.2 Orientation of PPB to Clear Ground
Space

3.10.A.v.a.ii Parallel or Side Approach

3.10.A.v.a.ii.1 Distance Between PPB and Clear
Ground Space

3.10.A.v.a.ii.2 Orientation of PPB to Clear Ground
Space

3.10.A.v.b Dimensions

3.10.A.v.c Slopes

3.10.A.v.d Surface

3.10.A.v.d.i Overlap with Detectable Warning Surface

Section 3.11 Pedestrian Signal Phase

3.11.A Travel Route

3.11.B Walk Phase Pedestrian Phase Time

3.11.C Pedestrian Clearance Time

3.11.D Total Pedestrian Crossing Phase Time

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

SECTION 1. GENERAL PROVISIONS

1.1 PURPOSE AND INTENT

Chino is a unique and dynamic city, one that continues to evolve with the revitalization of original neighborhoods and the development of new ones. As our community grows, the City is dedicated to assuring its sidewalks, crosswalks, parks, and buildings are usable by all residents and visitors, including those who have disabilities.

The City is committed to providing a thriving community where all residents are able to participate fully, and equally, in civic life; a place where everyone can live, work, and play. Pedestrian facilities not designed and constructed in accordance with federal and state accessibility regulations discriminate against individuals with disabilities by preventing them from accessing and using the services the City and others provide. With forethought and consideration these barriers can be prevented and, where existing, shall be removed. Working together, we will build a network of safe, accessible, and convenient pedestrian facilities throughout the City.

This Policy provides requirements for the implementation of accessibility regulations and best practices for the design and construction of pedestrian facilities open to the public within the City of Chino. The accessibility regulations that have proven challenging to understand, design, or construct are clarified herein. This document does not intend to provide or discuss all federal, state, and local codes or guidelines pertaining to accessibility. This Policy shall be utilized as a complement to those regulations and guidelines.

- A. Pedestrian Rights.** Pedestrians include individuals of all abilities. All persons, whether traveling by foot, wheelchair, or other mobility aid, have an equal right to use the pedestrian facilities open to the public. Pedestrians, including those who have disabilities, shall be provided the same level of service provided for bicycle and vehicular traffic on streets and highways.
- B. Universal Design.** Universal design should be applied in the design of pedestrian facilities. For the purpose of accessibility, universal design consists of providing a single, barrier-free element that can be utilized by all users, regardless of individual abilities.

1.2 DEFINITIONS

- A. Undefined Terms.** Undefined terms or words in this Policy will have the meanings assigned to them in the California Building Code, as may be amended or superseded from time to time, and, if not defined therein, will have the meaning as defined by collegiate dictionaries in the sense that the context implies.
- B. Defined Terms.** The terms defined herein have the indicated meaning. Words or terms used in the singular include the plural, and those used in the plural include the singular.
 - (1) **“ACCEPTED”** means accepted by City of Chino City Council.
 - (2) **“ACCESSIBILITY COORDINATOR”** is the City of Chino official responsible for the oversight, interpretation, and implementation of federal, state, and local accessibility statutes, regulations, and guidelines.

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

- (3) **“ADEQUATE”** For purposes of accessibility, “adequate” means compliant with all current accessibility requirements.
- (4) **“ALTERATION”** is a change to an existing facility that affects or could affect the usability of all or part of the facility. [28 CFR 35.151(b)]
- (5) **“COMPLIANT”** Meets all accessibility requirements in effect at the time of construction or alteration.
- (6) **“CROSSWALK”** is either: (a) That portion of a roadway included within the prolongation or connection of the boundary lines of sidewalks at intersections where the intersecting roadways meet at approximately right angles, except the prolongation of such lines from an alley across a street. (b) Any portion of a roadway distinctly indicated for pedestrian crossing by lines or other markings on the surface. (CVC 275)
- (7) **“CROSS-SLOPE”** The slope perpendicular to the direction of pedestrian travel. As the direction of pedestrian travel changes, so too does the orientation of the cross slope.
- (8) **“DIRECTIONAL CURB RAMP”** A curb ramp that is aligned parallel with the crosswalk, so there is a straight path of travel from the top of the curb ramp, to the center of the crosswalk, to the top of the curb ramp on the opposite side.
- (9) **“DISABILITY”** Disability is (a) a physical or mental impairment that limits one or more of the major life activities of an individual, (b) a record of such an impairment, or (c) being regarded as having such impairment.
- (10) **“EQUIVALENT FACILITATON”** The use of designs, products, or technologies as alternatives to those prescribed, resulting in substantially equivalent or greater accessibility and usability. In determining equivalent facilitation, consideration shall be given to means that provide for the maximum independence of persons with disabilities while presenting the least risk of harm, injury or other hazard to such persons or others.
- (11) **“EXTERIOR PEDESTRIAN CIRCULATION ELEMENTS”** see definition for (24) *Pedestrian Facility*.
- (12) **“FACILITY”** All or any portion of buildings, structures, site improvements, elements and pedestrian or vehicular routes located on a site.
- (13) **“FRONTAGE”** The street frontage includes the pedestrian facilities, including crosswalks, created by, prolonged from, or connected to any required or provided sidewalk improvements.
- (14) **“GOVERNING STANDARDS”** means the most current edition in force of any and all of the following. The Policy will be updated when relevant updates to the Governing Standards occur.
 - A. The Americans with Disabilities Act of 1990 (ADA) including:
 - a. The 2010 ADA Standards for Accessible Design (ADAS)

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

- b. The implementing regulations at 28 CFR parts 35 and 36
 - B. California Building Code [Part 2 of Title 24] (CBC)
 - C. California Vehicle Code
 - D. California Manual on Uniform Traffic Control Devices, current edition (MUTCD or CAMUTCD)
 - E. City of Chino Municipal Code
 - F. City of Chino Policy on Accessible Pedestrian Facilities
 - G. Best Practice Guidelines:
 - a. Shared Use Paths and Class I Bicycle Paths:
 - i. The Proposed Supplements to the Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way - Shared Use Paths (PROWAG)
 - ii. AASHTO Guide for the Development of Bicycle Facilities; Chapter 5: Design of Shared Use Paths
 - b. Temporary Traffic Control and Devices:
 - i. Work Area Traffic Control Handbook [WATCH] (WATCH Committee of Public Works Standards, Inc.)
 - c. Curb Ramps:
 - i. FHWA Designing Sidewalks and Trails for Access - Part II of II: Best Practices Design Guide
- (15) **“GRADE BREAK”**. The line where two surface planes with different slopes meet.
- (16) **“HIGHWAY”** “Highway” is a way or place of whatever nature, publicly maintained and open to the use of the public for purposes of vehicular travel. Highway includes street. (CVC 360)
- (17) **“INTERSECTION”** An “intersection” is the area embraced within the prolongation of the lateral curb lines, or, if none, then the lateral boundary lines of the roadways, of two highways which join one another at approximately right angles or the area within which vehicles traveling upon different highways joining at any other angle may come in conflict. (CVC 365)
- (18) **“MAINTENANCE”** refers to activities intended to keep existing facilities in proper operating condition in a routine, scheduled, or anticipated fashion to prevent failure and or degradation. Maintenance procedures do not affect the usability of the facility.
- (19) **“MANEUVERING SPACE”** The space where, because of the configuration of the physical environment or the location of accessible elements, a pedestrian is required to turn, or maneuver, or change direction in order to proceed along an accessible route.
- (20) **“MAY”** denotes an option or alternative.
- (21) **“MUST”** denotes a mandatory specification or requirement.
- (22) **“NON-COMPLIANT”** means facilities or elements that do not meet all currently-in-force accessibility requirements in effect at the time of their construction.

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

- (23) **“PEDESTRIAN”** (a) A “pedestrian” is a person who is afoot or who is using any of the following: (1) A means of conveyance propelled by human power other than a bicycle; (2) An electric personal assistive mobility device. (b) “Pedestrian” includes a person who is operating a self-propelled wheelchair, motorized tricycle, or motorized quadricycle and, by reason of physical disability, is otherwise unable to move about as a pedestrian. (CVC 467)
- (24) **“PEDESTRIAN FACILITY”** Pedestrian facilities include sidewalks, crosswalks, traffic control features, and curb cuts (depressed curbs and ramped sidewalks) and ramps for the older walkers and persons with mobility impairments. Pedestrian facilities also include bus stops or other loading areas, sidewalks on grade separations, and the stairs, escalators, or elevators related to these facilities. (AASHTO - A Policy on Geometric Design of Highways and Streets [Greenbook] 2.6.1)
- (25) **“PEDESTRIAN REFUGE”** is a pedestrian plaza located between the BCR and ECR of an intersection corner. A pedestrian refuge is accessible from the adjacent crosswalks and may or may not have connecting sidewalks.
- (26) **“PEDESTRIAN RIGHT OF WAY”** means and refers to all sidewalks over which the City of Chino has responsibility or authority. It includes but is not limited to as all curb ramps, transitions, and crosswalks serving such sidewalks and any other pathways or elements for use by pedestrians along public rights of way, including pedestrian pathways through public facilities and parking lots. “Pedestrian Right of Way” includes “Pedestrian Route”, “Pedestrian Path”, “Pedestrian Facility”, “Accessible Route”, “Accessible Path”, “Accessible Facility”, and any variations thereof.
- (27) **“PUBLIC ENTITY”** Any state or local government; any department, agency, special-purpose district, or other instrumentality of a state or local government. (DSA-AC)
- (28) **“PUBLIC PEDESTRIAN FACILITIES”** Facilities available to the public for use by pedestrians. Public pedestrian facilities may be publicly or privately owned.
- (29) **“PUBLIC USE AREA”** Interior or exterior rooms, spaces or elements that are made available to the public. Public use may be provided at a building or facility that is privately or publicly owned. (DSA-AC)
- (30) **“ROADWAY”** is that portion of a highway improved, designed, or ordinarily used for vehicular travel. (CVC 530)
- (31) **“RUNNING SLOPE”** The slope in the direction of pedestrian travel.
- (32) **“SHALL”** Denotes a mandatory specification or requirement.
- (33) **“SIDEWALK”** is that portion of a highway, other than the roadway, set apart by curbs, barriers, markings or other delineation for pedestrian travel. (CVC 555) Sidewalk is also a surfaced pedestrian route adjacent to a roadway and within a PROW.

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

- (34) **“SIGNALIZED”** means controlled by a traffic signal or traffic light. Does not refer to control via a stop or yield sign.
- (35) **“SIGNAL CONTROLLER”** The signal controller shall be considered the entire controller cabinet and all equipment contained inside of the cabinet.
- (36) **“STREET”** is a way or place of whatever nature, publicly maintained and open to the use of the public for purposes of vehicular travel. Street includes highway. (CVC 590)
- (37) **“TECHNICAL INFEASIBILITY”** refers to an alteration that has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member that is an essential part of the structural frame; or because other existing physical or site constraints prohibit modification or addition of elements, spaces, or features that are in full and strict compliance with the minimum requirements.
- (38) **“TRAFFIC”** The term “traffic” includes pedestrians, ridden animals, vehicles, street cars, and other conveyances, either singly or together, while using any highway for purposes of travel. (CVC 620)
- (39) **“TRANSITION”** Either an accessible element or improvement that connects dissimilar elements or improvements, or a portion or section of a pedestrian walking surface that connects an accessible walking surface to an existing, non-compliant walking surface. E.g., “transition panel”, “transition segment”, “transition section”, etc.

C. Acronyms. The following acronyms are used within this Policy.

AASHTO – American Association of State Highway and Transportation Officials

ADA – Americans with Disabilities Act (of 1990)

ADAAG – Americans with Disabilities Act Accessibility Guidelines

ADAS – Americans with Disabilities Act Standards

APS – Accessible Pedestrian Signal

APWA – American Public Works Association

BCR – Begin Curb Return

CAMUTCD – California Manual on Uniform Traffic Control Devices

CBC – California Building Code

CFR – Code of Federal Regulations

CVC – California Vehicle Code

DWS – Detectable Waring Surface

ECR – End Curb Return

FHWA – Federal Highway Administration

MUTCD – Manual on Uniform Traffic Control Devices

NACTO – National Association of City Transportation Officials

PPB – Pedestrian Push Button

PROW – Public Right-of-Way

PROWAG – Proposed Public Right of Way Accessibility Guidelines

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

SSPWC – Standard Specifications for Public Works Construction

SPPWC – Standard Plans for Public Works Construction, (“Greenbook”)

WATCH – Work Area Traffic Control Handbook

1.3 APPLICATION

This Policy shall apply during the design, construction, alteration, and maintenance of improvements in the public rights-of-way, exterior pedestrian circulation elements of public facilities, exterior pedestrian circulation elements of places of public accommodation, exterior pedestrian circulation elements of privately-owned facilities that are open to the public, and temporary pedestrian facilities associated with the construction or operation of the above facilities.

- A. Public Funds.** This Policy applies to any facility where public funds of the City, or any other government agency, are utilized for the design, construction, alteration, or maintenance of the facility.
- B. By Others.** This Policy applies to the construction, alteration, and maintenance of facilities by others where those facilities are provided for use by the public.
- C. Policy Effective Date.** The version of this Policy in effect at the time construction commences shall govern the work and improvements.
 - a) Non-Continuous Work.** Where work on a series of improvements is non-continuous, or work on specific elements is paused and then subsequently re-commenced, the effective date shall be the date of the re-commencement of construction. For purposes of this section, pauses or delays less than 60 calendar days shall be considered continuous.
 - b) Exception.** This section does not apply to work or improvements for which a building permit is required.

1.4 GOVERNING STANDARDS

- A. Applicability in the PROW.** Federal, state, and local accessibility standards apply to all public pedestrian facilities, including those located in the PROW.
- B. Minimum Requirements.** State and federal accessibility regulations set *minimum requirements*, both scoping and technical, for the design and construction of new or altered facilities.
 - i. City Authority.** The City has the authority to require elements are designed and constructed to a standard that is more accessible (more restrictive) than the required minimums.
- C. Order of Precedence.** Where there is a conflict between the requirements of Governing Standards, the requirement that provides the most restrictive condition shall prevail. The most restrictive condition is the condition that provides the greatest degree of pedestrian accessibility. Standards, guidelines, or other publications that provide a condition less accessible than the condition provided by the most restrictive minimum

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

state and federal accessibility standards shall not be utilized in the design or construction of pedestrian facilities.

- i. **Difference Between Requirements.** Where there is a difference between the requirements of governing standards, the requirements of both standards shall be provided.
- ii. **General and Specific Requirements.** Within an individual governing standard, specific requirements shall take precedence over general requirements.
- iii. **No Explicit Standard.** Where there are no explicit standards for a type a facility, and that facility is not specifically exempted from being accessible, it shall still be designed and constructed so it is readily accessible to and usable by individuals with disabilities.

D. Design Requirements.

- i. **Plan Review.** It is the responsibility of the project architect, engineer, and design professionals to ensure each project is designed to fully comply with the Governing Standards. City staff conducts a courtesy review of plans to assist in identifying deficiencies. The review is an exercise to assist the responsible designer with compliance.
 - a) **Mandatory Construction Note.** The following language shall be on all sets of construction plans. "All design and construction activities, including those for temporary facilities, shall be completed in full compliance with federal, state, and local accessibility regulations and policies."
- ii. **Design Tolerances.** Designers shall specify a measurement or dimension more than the allowable minimum or less than the allowable maximum on all submittals. The design measurement or dimension shall incorporate at least the amount of the expected industry field tolerance or anticipated construction deviation. Constructed improvements will be evaluated based upon their compliance with Governing Standards and the technical specifications provided herein, not with the design dimensions.
 - a) **Minimum Clear Width.** Design work shall account for the finishing and tooling practices that may reduce the usable area of a walking surface below the required clear width. Facilities constructed that do not comply with minimum clear width requirements due to finishing and tooling practices shall be remediated to comply.
 - b) **Maximum Slope.** Sidewalks and walks shall be designed with a maximum designed running slope no greater than 1:25 (4.0%). Curb ramp runs shall be designed with a maximum designed running slope no greater than 1:14 (7.2%). Curb ramp flares shall be designed with a slope no greater than 1:11 (9.0%). All other pedestrian walking surfaces with maximum slope requirements shall be designed with slopes at least 0.5% less than the maximum allowable slope.

- E. **Construction and Manufacturing Tolerances.** All dimensions are subject to conventional industry tolerances, except where the requirement is stated as a range

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

with specific minimum and maximum end points. The range provides adequate tolerance and no tolerance outside of the range is permitted.

- F. Quality Requirements.** All improvements are subject to the quality requirements of the current edition of the Standard Specifications for Public Works Construction.
- G. Measurement.** Given the high level of specificity required for achieving compliance, measurement tools that are precise, accurate, and consistent are preferred. In most circumstances, a properly calibrated four-foot smart level is sufficient for determining the slope of constructed improvements. However, where an abrupt change in level, grade break, or divot in pavement is present, a two-foot properly calibrated smart level provides the level of measurement needed.
- H. Equivalent Facilitation.** Wherever accessible facilities or elements are required as part of new construction or alteration projects, alternate designs or elements that provide access equivalent to, or greater than, the current Governing Standards may be provided. It is the responsibility of the party proposing the equivalent facilitation to demonstrate the proposed design's compliance with all governing standards and its equal effectiveness to the satisfaction of the City of Chino.

SECTION 2. IMPROVEMENTS

2.1 NEW CONSTRUCTION

- A. Americans with Disabilities Act.** Each facility or part of a facility constructed on behalf of, or for the use of the City shall be designed and constructed in such manner that the facility or part of the facility is readily accessible to and usable by individuals with disabilities, if the construction was commenced after January 26, 1992.
- B. California's Government Code.** All newly constructed elements shall be fully compliant with accessibility requirements in effect at the commencement of construction.
- C. Project Scope.** The scope of new construction projects shall not be structured to avoid the obligation to provide accessible pedestrian facilities. The limits of work shall include the improvement of pedestrian facilities. These improvements shall be incorporated into the scope of the project.
 - i. Frontage Improvements.** Any person constructing, or causing to be constructed, any building, dwelling, private, public or semipublic parking lot, or developing any residential, commercial, or industrial areas in the City shall provide for construction, at his own cost, concrete curbs, gutters, asphalt concrete street pavement, sidewalks, and street lights in accordance with the Governing Standards and the requirements, standards and specifications of the City.
 - a) Location.** These improvements shall be constructed along all public street frontage adjoining the lot, unless adequate improvements already exist in accordance with the Governing Standards and streets portion of the master plan of the City.

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

- ii. **Application for Finding of Technical Infeasibility.** A finding of technical infeasibility is a rare occurrence reserved for those circumstances where it is not structurally possible to alter a facility in compliance with minimum accessibility regulations.
 - a) **Review.** Determining technical infeasibility requires a site-specific assessment of constraints in relation to the planned scope of work. A request for the determination of technical infeasibility, shall be submitted in writing to the Accessibility Coordinator, Director of Public Works, and the City Engineer. A ruling of technical infeasibility requires written approval by staff and final approval by City Council as the Enforcing Agency.
 - b) **Qualifications.** Technical infeasibility may apply to alterations. Technical infeasibility does not apply to new construction. Technical infeasibility is considered relative to the planned scope of work. Chino is a relatively flat City whose terrain generally does not pose a technical barrier to the design and construction of accessible pedestrian facilities. The acquisition of right of way, relocation of existing improvements, reconstruction of existing facilities, undergrounding or relocation of utilities, or the regrading of a site or roadway do not, in themselves, qualify an improvement as technically infeasible. Cost, in itself, does not qualify an improvement as technically infeasible.
 - c) **Transitions to Non-Compliant Improvements.** Where altered facilities connect or abut existing adjacent improvements that are non-compliant, the connection or abutment shall be made by means of a transition segment.
- iii. **Location of Transition Segment.** A transition segment shall only occur outside the design area and Project Work.
 - a) **Street Corners.** If the project involves improvements to a street corner, the transition segment shall be located before the BCR or after the ECR, and before or after the line of the corner cutoff.
- ii. **Technical Requirements of Transition Segment.** Transition segments may be warped, skewed, or otherwise configured to make a smooth transition between the compliant surface and the existing non-compliant surface.
 - a) **Running Slope.** The running slope of the transition panel shall not exceed 1:25 (4.0%).
- G. **Alteration of Accessible Routes.** The alteration of an accessible route includes any modification that changes the route's usability. Alterations of existing accessible routes include activities such as resurfacing, repaving, replacing, or widening.
 - i. **Non-Compliant Adjoining Facilities.** Wherever an accessible route is altered, non-compliant facilities within the accessible route shall be made to comply with current Governing Standards. This may include, but shall not be limited to, the provision of:
 - a) **Accessible Sidewalks.** Accessible sidewalks or walks between the BCR and ECR where adjoining curb transitions are altered.

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

compliant with Governing Standards. These pedestrian facilities include curb ramps or other transitions, pedestrian push buttons, PPB clear ground space, and crosswalks.

a) Curb Ramps. Existing non-compliant curb ramps shall be made compliant or replaced. Where there are no curb ramps, they shall be designed and constructed new. *See Curb Transitions Scoping 3.7.A.*

I. Alteration of Traffic Control Devices. The alteration of a traffic control device is any modification that changes the usability of an intersection or street for pedestrians or vehicles.

i. Minor Alterations of Traffic Signals. Where minor alterations are made to a traffic signal only the alteration itself is required to comply with Governing Standards.

a) Examples. Minor alterations include, but are not limited to, the following:

- a. Addition of APS (only)
- b. Replacement of pedestrian signal head
- c. Replacement of damaged signal pole in kind.
- d. Relocation of existing PPB to accommodate curb ramps
- e. Controller repair
- f. Addition or repair of Opticom system, LPR, or CCTV
- g. Addition of battery backup to an existing installation

ii. Major Alterations of Traffic Signals. Any alteration not minor in nature requires the pedestrian facilities at the altered intersection be made compliant with the current Governing Standards. Where a major alteration occurs to a traffic signal, accessible pedestrian signals (APS) shall be provided and the pedestrian facilities that provide access across the associated streets, roadways, or highways shall be made compliant with current accessibility standards. These pedestrian facilities include curb ramps or other transitions, pedestrian push buttons, PPB clear ground space, and crosswalks.

a) Examples. Major alterations include, but are not limited to, the following:

- (i) Addition of a new pedestrian phase
- (ii) Addition of a new vehicle phase
- (iii) Upgrade or replacement of the signal controller

iii. Emergency Traffic Signal Alterations. Nothing in this Policy shall prevent City staff from installing traffic control devices to protect vehicle and pedestrian safety in emergency situations. Should an emergent traffic situation arise, which presents significant and immediate harm to vehicular or pedestrian traffic, the traffic alteration may be completed first and the required pedestrian improvements shall be designed and constructed in a timely manner at a later date. The timeline for completion shall be documented and communicated to the Transportation Manager and Accessibility Coordinator.

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

- J. Alteration of Signage and Striping.** The alteration of signage and striping includes any modification that changes the usability of the subject facility.
- i. Stop Sign Installation.** The installation of a stop sign where one did not previously exist may require the pedestrian facilities within the intersection be made compliant with Governing Standards.
 - a) No Existing Yield Condition.** For a specific leg of an intersection, the addition of a stop sign where an approaching driver is not required to yield, or a yield condition was not previously established by signage or traffic laws, requires the pedestrian facilities within the entire intersection be made compliant with Governing Standards.
 - b) Existing Yield Condition.** For a specific leg of an intersection, the addition of a stop sign where an approaching driver should yield, or a yield condition is already established by signage or traffic laws, does not require the associated pedestrian facilities be made compliant with Governing Standards.
 - ii. Addition of a Marked Crosswalk at an Intersection.** The addition of a marked crosswalk at an intersection requires the pedestrian facilities serving the altered leg of the intersection be made compliant with Governing Standards. This includes, but is not limited to, the pedestrian walking surface within the roadway and the associated curb transitions.
 - iii. Addition of a Midblock Crosswalk.** The addition of a midblock crosswalk requires the pedestrian facilities serving the crosswalk be made compliant with Governing Standards. This includes, but is not limited to, the pedestrian walking surface within the roadway and the associated curb transitions.
 - iv. Emergency Signage Alterations.** Nothing in this Policy shall prevent City staff from installing signage or striping to protect vehicle and pedestrian safety in emergency situations. Should an emergent traffic situation arise, which presents significant and immediate harm to vehicular or pedestrian traffic, the signage alteration may be completed first and the required pedestrian improvements shall be designed and constructed in a timely manner at a later date. The timeline for completion shall be documented and communicated to the Transportation Manager and Accessibility Coordinator.

2.3 NON-COMPLIANT UNACCEPTED IMPROVEMENTS

- A. Unaccepted Improvements.** Improvements shall not be deemed existing until accepted by City Council. Improvements are evaluated for compliance under the Governing Standards in effect at the time of their construction. Unaccepted non-compliant improvements are subject to the Governing Standards for new construction in effect at the time of their construction or alteration (remediation).
- B. Required Improvements.** The new construction or alteration of improvements within, or on the frontage of, a project that contains unaccepted pedestrian facility improvements shall remediate any and all non-compliant pedestrian improvements prior to acceptance. This includes, but is not limited to, pedestrian facilities within the site and on the site frontage.

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

2.4 MAINTENANCE

- A. Overview.** The maintenance of existing facilities involves treatments that preserve and provide upkeep to the improvement as it is constructed. Maintenance activities do not require associated pedestrian facilities be made compliant with Governing Standards. However, if the accessibility of a pedestrian facility can be reasonably improved within the limits of the maintenance work, the improvement to accessibility should be made as part of the maintenance work.
- B. Several Maintenance Treatments Are An Alteration.** The combination of several maintenance treatments occurring at or near the same time may qualify as an alteration. If the usability of the item or facility is affected, the improvements shall comply with requirements for alterations.
- C. Street and Roadway Maintenance.** Maintenance treatments are work that preserve an element, or prolong its usable life, or serve solely to seal and protect the road surface, improve friction, and control splash and spray. These treatments do not significantly affect the public's access to or usability of the road.
- i. Examples.** The following common improvements are examples of street and roadway maintenance activities
- a. Re-striping or painting
 - b. Chip seals
 - c. Fog seals
 - d. Scrub sealing
 - e. Crack filling and sealing
 - f. Joint crack seals
 - g. Slurry seals
 - h. Diamond grinding
 - i. Joint repairs
 - j. Spot high-friction treatments
 - k. Dowel bar retrofit
 - l. Pavement patching
 - m. Pothole repairs
 - n. Surface sealing
 - o. Trench Repair (*see Trench Repair, Alterations*)
- D. Traffic Signal Maintenance.** Traffic signal maintenance activities preserve existing signal operations or equipment. These activities do not significantly impact the public's access to or usability of the facilities.
- i. Examples.** Traffic signal maintenance includes, but is not limited to, the following activities:
- a. Replace hardware in kind
 - b. Software update
 - c. Rewire in existing conduit
 - d. Replace conduit for existing traffic signal phasing or detection system
 - e. Change to an existing pedestrian phase
 - f. Change to an existing vehicle phase

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

- g. Installation of new, repair, or replacement of traffic detection devices, such as video or loop detectors
 - h. Replace luminaries or bulbs in electrified streetlights or signs
- ii. **Replacement of All PPB at an Intersection.** Where all PPBs are replaced at an intersection as part of maintenance work, the PPBs shall be upgraded to APS.
- E. **Signage and Striping Maintenance.** Signage and striping maintenance activities preserve an existing signage or striping configuration. These activities do not significantly affect the public's access to or usability of the facilities.
- i. **Examples.** Signage and striping maintenance includes, but is not limited to, the following activities:
- a. Realignment of existing crosswalk striping where the overall configuration of pedestrian traffic does not change
 - b. Restriping in kind
 - c. Stripe yellow dividing lane at L Intersections
 - d. Stripe new bike route or lane
 - e. Stripe new scramble lane
 - f. Lengthen striping of turn pocket lane
 - g. Addition of In-Roadway Warning Light to an existing marked crosswalk
 - h. Add/remove curb paint, street maintenance signage, no stopping sign, etc.
 - i. Replacing signage in kind

SECTION 3. SCOPING AND TECHNICAL REQUIREMENTS

3.1 TEMPORARY TRAFFIC CONTROL

- A. **Safe and Accessible Pedestrian Access.** Temporary traffic control (TTC) shall provide safe and accessible pedestrian access during any work that may disrupt or obstruct pedestrian traffic.
- i. **Alternate Route.** An alternate pedestrian route shall be provided where an existing pedestrian route is obstructed, blocked, or otherwise rendered inaccessible by work and its associated materials or equipment. A pedestrian route should not be obstructed and/or rerouted for non-construction activities such as parking for vehicles.
- a) **Technical Requirements.** The alternate route shall be safe, convenient, and accessible in compliance with Governing Standards.
- ii. **Prior to the Start of Work.** Temporary traffic control, including necessary signage, for pedestrians and vehicles shall be in place prior to the start of any construction work.
- iii. **Notification.** Notification of long-term stationary sidewalk closures shall be provided in advance of the commencement of the work.

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

- B. Barriers.** Continuous edging shall be provided at the bottom of all fencing, barricades, and barriers used in TTC for pedestrians. Cones, tape, and other discontinuous barriers are not cane-detectable and shall not be utilized as TTC for pedestrians.
- C. Work Vehicle Movement.** Movement by work vehicles and equipment across designated pedestrian paths should be minimized and, when necessary, should be controlled by flaggers or TTC. Staging or stopping of work vehicles or equipment along the side of pedestrian paths should be avoided, since it encourages movement of workers, equipment, and materials across the pedestrian path.

3.2 WALKING SURFACES

- A. Walking Surfaces.** Ground surfaces shall be stable, firm, and slip resistant.
 - i. Water Pooling.** Curb ramps shall be designed and constructed to prevent water from pooling or ponding on the walking surface.
 - ii. Surface Materials.** The materials used to construct the surface of a pedestrian walking surface shall meet or exceed minimum accessibility standards.
 - a) Aggregate Materials.** Aggregate materials such as decomposed granite may be utilized as the surface of a pedestrian walking surface if the material is properly stabilized, adequately maintained, and the surface complies with the minimum accessibility standards. Crushed miscellaneous base (CMB) shall not be used as the surface of a pedestrian walking surface.
 - b) Individual Paving Units.** Individual paving units or pavers shall not be utilized to construct pedestrian walking surfaces within the PROW. Pavers may be used within the pedestrian route on private property when the surface complies with the requirements for a pedestrian walking surface. See *3.2.C Expansion and Construction Joints, 3.2.D Changes in Level*.
 - c) Stamped Surfaces.** Walking surfaces stamped to provide visual distinction and texture shall comply with the requirements for a pedestrian walking surface. See *3.2.C Expansion and Construction Joints, 3.2.D Changes in Level*.
- B. Openings.** Openings in ground surfaces shall not allow passage of a sphere more than one half-inch diameter. Elongated openings shall be placed so the long dimension is perpendicular to the dominant direction of pedestrian travel.
 - i. Pull Box Covers and Manhole Lids.** Openings greater than one half-inch shall be plugged or filled.
- C. Expansion and Construction Joints.** Expansion or construction joints between panels or paving units shall not be greater than one half-inch wide and shall be oriented perpendicular to the predominant direction of pedestrian travel. Existing joints greater than one half inch shall be grouted or caulked with suitable crack filler or stabilized caulk.

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

- a) **Sidewalks and Walks.** Sidewalks and walks open for use by the public, whether privately or publicly owned, shall have a minimum usable clear width of 60". Specific project or code requirements may require a wider clear width.
 - b) **Paved Border Surfaces Adjacent to Vehicular Roadways.** Paved border surfaces adjacent to private residential roadways such as motor courts, alleys, drive aisles, or similar vehicular ways, shall have a width less than 18 inches.
- iii. **Passing Spaces.** Where permitted, sidewalks or walks with a clear width less than 60 inches shall provide passing spaces at intervals of 200 feet maximum. Passing spaces shall be either: a space 60 inches minimum by 60 inches minimum; or, an intersection of two walking surfaces providing a T-shaped space where the base and arms of the T-shaped space extend 48 inches minimum beyond the intersection.
- a) **Maneuvering Areas.** Passing spaces are maneuvering areas. Slopes shall not exceed 1:48 (2.083%) in any direction.
 - b) **Width Transitions.** Changes in sidewalk width shall occur gradually. See *Width Transitions 3.3.B.v*
- iv. **Location of Obstructions.** Obstructions (utility fixtures, signposts, parking meters, street lights, signal poles, etc.) shall be located outside of the required clear width of the sidewalk or be located completely within the landscaped portion of the parkway.
- v. **Width Transitions.** Changes in sidewalk or walk width shall occur gradually. The panels of transition shall be constructed with a taper no less than one foot in four feet (1:4).
- vi. **Slopes.** Except where required by landings, turning spaces, and maneuvering areas, the required slopes for a walking surface shall be maintained for the full clear width of an accessible route.
- a) **Running Slope.** The running slope of a walking surface shall not exceed 1:20 (5.0%).
 - b) **Cross Slope.** The cross slope of a walking surface shall not exceed 1:48 (2.083%).
 - c) **Gutter Slopes.** The counter slopes of adjoining gutters and road surfaces immediately adjacent to and within 24 inches on each side of the curb ramp run, shall not exceed 1:20 (5.0%). Cross slope shall not exceed 1:48 (2.083%). This includes 24 inches of the gutter on each side of the ramp run and 24 inches on the street side of the gutter. Where a gutter is part of a maneuvering area it shall comply with technical requirements for a maneuvering area.
- vii. **Surface Grinding or Bushing.** Surface grinding or bushing of pedestrian facilities is not permitted in new construction and alteration projects. Surface grinding or bushing may be utilized in maintenance work. Grinding or bushing shall not create abrupt changes in surface level or otherwise cause a reduction in access to the

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

facility or adjacent facilities. Where grinding or bushing is used, the surface shall be striated or be otherwise made slip resistant.

- C. Continuous Sidewalk Across Alleys, Driveways, and Private Streets.** Sidewalks shall continue uninterrupted across alleys, driveways, and private streets. They shall be constructed in compliance with the technical requirements for a pedestrian walking *surface*.

i. Configuration.

- a) Non-Curb Adjacent.** Where there is a landscaped area between the sidewalk and roadway, the sidewalk shall continue straight in-line across the alley, driveway, or private street.
- b) Curb Adjacent.** Where the sidewalk is curb adjacent, the sidewalk across the alley, driveway, or private street may be setback around the drive approach. The setback, shall be no greater than necessary to accommodate a 1:10 (10%) slope on the vehicular access surface.
- c) Width.** The required minimum clear width of the sidewalk or walk shall be maintained.
- d) Slopes.** The running slope of a walk or sidewalk shall not exceed 1:20 (5.0%). The cross slope shall not exceed 1:48 (2.083%). The required slopes for a walking surface shall be maintained for the full clear width of an accessible route.
- e) Maneuvering Areas.** Slopes shall not exceed 1:48 (2.083%) in any direction.
- f) Detectable Warning Surfaces.** Detectable warning surfaces at alleys, driveways, and private streets shall be installed only where the vehicular traffic is controlled by a traffic signal. Detectable warning surfaces should not be installed at alleys, driveways, and private streets where vehicular traffic is uncontrolled or is controlled by a stop or yield sign.

3.4 SHARED USE PATHS AND OTHER IMPROVED PEDESTRIAN PATHS

- A. Scoping.** Shared use paths, multi-use paths, and other improved pedestrian paths within the City are transportation corridors that may be designed for a variety of users. Any improved pedestrian path, used by pedestrians or intended for use by pedestrians, shall comply with Governing Standards and be fully accessible. This includes, but is not limited to, Class I Bikeways, shared use paths, paseos, multipurpose trails, pedestrian/equestrian paths, and other such walking surfaces.
- B. Technical Requirements.** All shared use paths and other improved pedestrian paths shall comply with Governing Standards and be fully accessible. Other guidelines or regulations applicable to a specific type of facility (i.e. AASHTO Shared Use Paths) may be used if the condition provided therein meets or exceeds minimum accessibility requirements.

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

- i. **Surface.** Pedestrian paths shall comply with Governing Standards for pedestrian walking surfaces.
 - a) **Aggregate Materials.** Paths may be comprised of aggregate material only where it is properly stabilized, regularly maintained, and complies with Governing Standards for pedestrian walking surfaces and, if applicable, the requirements for bikeway surfacing.
 - (i) **Crushed Miscellaneous Base.** Crushed miscellaneous base (CMB), or similar material, is expressly prohibited from being used as the surface material for a shared use path or any other pedestrian path.
- ii. **Width.** The entire clear width of an improved pedestrian path shall comply with Governing Standards.
- iii. **Slopes.** The running slope of improved pedestrian paths shall not exceed 1:20 (5.0%). The cross slope of improved pedestrian paths shall not exceed 1:48 (2.083%).
- iv. **Signage and Markings.** Traffic control signage and markings shall be installed and shall conform to the CAMUTCD guidelines for the specific type of facility.

3.5 OBSTRUCTIONS AND PROTRUDING OBJECTS

- A. **Scoping.** Objects and protruding objects shall not reduce the required clear width of pedestrian routes.
 - i. **Location of Elements.** Objects in sidewalks, walks, and other improved pedestrian paths shall be located outside the minimum clear width of the pedestrian facility. This includes, but shall not be limited to, utility fixtures, street furniture, fire hydrants, signposts, streetlights, signal poles, mailboxes, guy wires, and similar elements.
 - ii. **Landscaped Areas.** Where landscaped areas are provided between the curb and the sidewalk, all obstructions shall be placed in the landscaped portion and they shall not protrude into the sidewalk clear width.
- B. **Technical Requirements.** Objects that protrude into or over a pedestrian route shall comply with Governing Standards.
 - i. **Horizontal Clearance.** Protruding objects shall not reduce the minimum required clear width of walks or sidewalks.
 - a) **Undetectable Projections.** Objects located between 27 inches and 80 inches above the ground are not detectable by white cane users. These objects shall protrude no more than four inches into a sidewalk or walk. Objects more than 84 inches above the ground are unregulated, except where they are installed on shared use paths, other improved pedestrian paths, or parking stalls.

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

b) Detectable Projections. Objects located less than 27 inches above the ground are detectable by white cane users and may protrude more than four inches into a sidewalk or walk.

ii. Vertical Clearance.

a) Pedestrian Routes. Objects located within or over a pedestrian route shall provide a minimum vertical clearance of 84 inches.

b) Accessible Parking. Signs and elements within or over accessible parking stalls and access aisles shall provide a minimum vertical clearance of 98 inches.

c) When Minimum Clearance Is Not Provided. Where vertical clearance is less than the required minimum, guardrails or other barriers complying with Governing Standards shall be provided.

iii. Specific Obstructions.

a) Guy Wires and Braces. Guy wires and braces shall provide a minimum vertical clearance of 84 inches above pedestrian walking surfaces. Guy wires and braces shall not reduce the minimum clear width of a pedestrian route.

(i) Angled Guy Supports. Angled guy supports shall not be located within the pedestrian route or within 24 inches of the pedestrian route. Angled guy supports may be used if they are located 24 inches or more outside the pedestrian route and provide the required minimum vertical clearances.

1. Remediation. Non-compliant angled guy supports shall be remediated as part of any alteration or new construction project. Angled guy supports located within the pedestrian route or within 24 inches of the pedestrian route shall be relocated a minimum of 24 inches outside the sidewalk; or the angled support shall be replaced with a vertical brace that provides a minimum vertical clearance of 84 inches.

(ii) Vertical Guy Braces. A vertical guy brace, sidewalk guy, or other similar device that meets or exceeds the minimum clear width and vertical clearance requirements may be used within a pedestrian route or within 24 inches of the route's edges.

b) Mailboxes. Individual mailboxes shall not reduce the minimum required clear width of a pedestrian route. Mailboxes shall comply with the accessibility requirements for protruding objects.

(i) Cluster Mailboxes. Multi-box units or cluster mailboxes shall not protrude into or obstruct a pedestrian route. A minimum clear ground space of thirty inches by forty-eight inches shall be provided and positioned to serve the mailboxes' operable parts. Except for in unusual conditions, the clear ground space shall be positioned for a parallel (side) approach and shall comply with the regulations for side reach.

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

3.6 MANEUVERING AREAS

- A. Scoping.** A maneuvering area is the space where a pedestrian is required to turn, maneuver, or change direction in order to proceed along a pedestrian route. Maneuvering areas are typically located where two or more paths meet, overlap, or intersect, where a path changes direction, or where an accessible route ends and the pedestrian must turn around.
- i. Intersection Corners.** The paved pedestrian plaza located at the corners of intersections, where the sidewalk expands into a wide circular segment between the curb radius and the corner cutoff line, requires pedestrians to travel in multiple directions to utilize the pedestrian facilities. These areas are maneuvering areas.
 - ii. Crosswalks.** The portion of the roadway where a pedestrian is required to maneuver to stay safely within the limits of the crosswalk is a maneuvering area. Diagonal and skewed perpendicular curb ramp designs create maneuvering areas in the gutter and crosswalk. Curb ramps that provide a truly directional route, where the direction of travel down the curb ramp run is parallel with the direction of travel within the crosswalk, do not have a maneuvering area within the gutter or crosswalk.
 - a) Gutters.** The portion of the gutter included within a maneuvering area shall be designed and constructed to comply with requirements for a maneuvering area.
 - iii. Passing Spaces.** Passing spaces provided along a pedestrian route are maneuvering areas.
 - iv. Intersecting Sidewalks or Walks.** Where sidewalks or walks overlap or intersect, they create an area where a pedestrian changes direction. The portion of the sidewalk or walk that intersects is a maneuvering area.
 - v. Setbacks at Driveway, Alley, and Private Street Crossings.** The portion of a sidewalk or walk that changes direction around a driveway, alley, or private street approach is a maneuvering area.
 - vi. Bus Stops and Loading Zones.** Bus stops and loading zones located on, or contiguous to, sidewalks or walks create a pedestrian plaza with multiple accessible routes and differing pedestrian directions of travel. The plaza area of bus stops and loading zones is a maneuvering area.
 - vii. Meandering Sidewalks.** When built according to Governing Standards, the curves in meandering sidewalks or walks typically do not have excessive cross-slopes and therefore shall not be considered maneuvering areas. These facilities shall meet the requirements for a pedestrian walking surface.
- B. Technical Requirements.** As pedestrians maneuver and change direction, so too does the orientation of the pedestrians' cross slope. Governing Standards for maneuvering areas address this.

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

- i. **Location and Configuration of Maneuvering Areas.** The boundaries of a maneuvering area are delineated by the extension of the boundaries of the walking surfaces that enter it.
 - a) **Crosswalks.** The location of any maneuvering area within a crosswalk shall be determined by extending the boundary lines of a curb ramp run to the outermost boundary of the crosswalk.
 - (i) **Gutters.** A maneuvering area adjacent to a skewed or diagonal/shared curb ramp will include the gutter.
- ii. **Size.** A maneuvering area shall be no less than 48 inches long and 48 inches wide. The width of any side of a maneuvering area shall be at least as wide as the adjoining pedestrian ways that create it.
- iii. **Slopes.** The slopes in a maneuvering area shall not exceed 1:48 (2.083%) in any direction.

3.7 CURB TRANSITIONS

- A. **Scoping.** Curb ramps or curb transitions are required at every location where a prepared pedestrian surface crosses a curb. Where each marked or unmarked crosswalk connects to a prepared pedestrian surface, a curb ramp or curb transition shall be installed.
 - i. **Curb Transitions at New or Altered Streets.** Curb ramps or curb transitions shall be provided at any intersection of newly constructed or altered streets, roads, and highways having curbs or other barriers to entry from a street level pedestrian walkway.
 - ii. **Curb Transitions at New or Altered Pedestrian Walks.** Curb ramps or curb transitions shall be provided where newly constructed or altered street level pedestrian walks intersect streets, roads, or highways.
 - iii. **Curb Transitions At Unprepared Surfaces.** Where the boundaries of sidewalks prolongate across an intersection and create a crosswalk, curb ramps shall be provided where the sidewalk or walk crosses the curb on the initiating side of the crosswalk. Curb ramps may be required on the receiving side of a crosswalk where there is no prepared pedestrian walking surface.
 - a) **Signalized Intersection.** If the intersection is signalized, a curb ramp and pedestrian refuge shall be provided on the receiving side of the crosswalk, where there is no prepared pedestrian surface. This curb ramp and pedestrian refuge shall provide access to pedestrian push buttons.
 - b) **Unsignalized Intersection.** If the intersection is unsignalized, curb ramps are not required on the receiving side of the crosswalk where there is no prepared pedestrian surface.
 - iv. **Types of Curb Ramps and Transitions.** A curb ramp or curb transition shall be provided where a prepared pedestrian surface crosses a curb.

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

- a) **Directional Perpendicular Curb Ramps.** A directional perpendicular curb ramp is aligned parallel with the crosswalk and perpendicular to the curb. This curb ramp design provides a straight path of travel from the top of the curb ramp, to the middle of the crosswalk, to the top of the curb ramp on the opposite side.
 - b) **Directional Non-Perpendicular Curb Ramps.** Curb ramps aligned parallel with the crosswalk but that do not meet the curb perpendicularly are Directional Non-Perpendicular Curb Ramps. This design provides a straight path of travel from the top of the curb ramp, to the middle of the crosswalk, to the top of the curb ramp on the opposite side.
 - c) **Skewed Perpendicular Curb Ramps.** Curb ramps that meet the curb perpendicularly but are not aligned parallel with the crosswalk are Skewed Perpendicular Curb Ramps.
 - a. **Maneuvering Area.** Maneuvering area shall be provided at the bottom of the curb ramp and within the crosswalk. *See Maneuvering Areas for skewed perpendicular curb ramps 3.6.A.ii.a.*
 - d) **Shared or Diagonal Curb Ramps.** Curb ramps that serve more than one crossing, such as diagonal curb ramps, are prohibited in new construction and alteration projects. Diagonal or shared ramps may be constructed when all other curb transition designs are determined to be technically infeasible.
 - (i) **Exception.** Where a non-compliant diagonal ramp, or its individual components (ramp run, landing, detectable warning surface, flares, or gutter), is remediated for the sole purpose of providing accessibility, the diagonal ramp design may remain. To qualify as an exception, the activities shall not otherwise be part of an alteration project and the extent of the curb ramp remediation shall not qualify as an alteration.
 - e) **Blended Transitions.** A transition where the sidewalk is lowered, or the crosswalk is raised to create a flush transition from one to the other.
 - f) **In-Line Transitions.** Transitions in-line or parallel with the pedestrian walk or sidewalk are In-Line Transitions.
 - g) **Center Medians and Islands.** Where a pedestrian route intersects a center median or curbed island, a cut-through shall be provided to provide a continuous pedestrian route.
- B. Priority of Curb Transition Design.** Curb transition designs shall be utilized in the following order of priority, listed from the highest priority to least priority for use. Designers and engineers shall utilize designs 1, 2, or 3 before resorting to the utilization of designs 4, 5, or 6.
- (1) Directional Perpendicular Curb Ramp
 - (2) Directional Non-Perpendicular Curb Ramp
 - (3) In-Line Transition
 - (4) Blended Transition

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

- (5) Skewed Perpendicular Curb Ramp
- (6) Diagonal or Shared Curb Ramp

C. Technical Requirements.

- i. **Water Pooling.** Curb ramps shall be designed and constructed to prevent water from pooling or ponding on the walking surface.

- ii. **Curb Ramps.**

- a) **Location.** A directional perpendicular curb ramp shall be located so the ramp run is directional to the crosswalk and perpendicular to the curb face. Curb ramps at marked crossings shall be entirely contained within the crosswalk markings, excluding flared sides (where provided).

- b) **Landing.** A landing shall be provided at the top of the directional perpendicular curb ramp.

- (i) **Depth and Width.** The clear depth of a landing shall be a minimum of 48 inches. The clear width of a landing shall be at least as wide as the width of the curb ramp run.

- (ii) **Slopes.** The slopes of the landing shall not exceed 1:48 (2.083%) in any direction.

- c) **Curb Ramp Run.**

- (i) **Width.** The clear width of a curb ramp run shall be a minimum of 48 inches.

- 1. **Shared Use or Other Improved Pedestrian Path.** A curb ramp, or other curb transition, serving a shared use or other such improved pedestrian path shall have a minimum width of the path leading to it.

- 2. **Bordered By A Curb.** A curb ramp that is bordered by a curb, on one or both sides, shall have a minimum width of five feet. Curbs shall run parallel to the direction of the ramp run.

- (ii) **Slopes.** The running slope of a ramp run shall not exceed 1:12 (8.33%). The cross slope of a ramp run shall not exceed 1:48 (2.083%).

- 1. **Grade Breaks.** Grade breaks shall not be located on ramp runs. Grade breaks shall only be located at the top and bottom of a ramp run and shall be oriented perpendicular to the direction of the ramp run. Surface slopes that meet at grade breaks shall be flush.

- 2. **Grade Breaks on Directional Non-Perpendicular Curb Ramps.** Directional curb ramps that are not truly perpendicular to the curb face shall have the bottom perpendicular grade break behind the curb face. The grade break shall be located at the bottom end of the shorter side of the ramp run. This results in a triangular walking surface between the lower grade break and the curb face. The running slope of this

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

triangular segment shall not exceed 1:20 (5.0%). The cross slope of this triangular segment shall not exceed 1:48 (2.083%).

d) Flares.

(i) **Location.** The flared sides of curb ramps shall be located so they do not project into vehicular lanes, parking spaces, or parking access aisles.

(ii) **Slopes.** Where provided, curb ramp flares shall not exceed 1:10 (10.0%) in any direction.

e) Gutters.

(i) **Slopes.** The counter slopes of adjoining gutters and road surfaces immediately adjacent to and within 24 inches, on each side of the curb ramp run, shall not exceed 1:20 (5.0%). This includes 24 inches of the gutter on each side of the ramp run and 24 inches on the roadway side of the gutter. Where a gutter is part of a maneuvering area it shall comply with technical requirements for a maneuvering area.

(ii) **Adjacent Surfaces at Transitions.** The adjacent surfaces at curb transitions or curb ramps to sidewalks, walks, gutters, and roadways shall be flush.

f) **Detectable Warning Surface.** A detectable warning surface in compliance with Governing Standards shall be placed at the bottom of the ramp run, with the edge placed at the back of the curb. The warning surface shall extend the full length of the zero curb face and shall have a minimum depth of three feet in the direction of travel.

iii. Blended Transitions.

a) **Width.** The width of the transition shall be at least as wide as the width of the pedestrian way leading to it.

b) **Slopes.** The running slope of a blended transition shall not exceed 1:20 (5.0%). The cross slope of a blended transition shall not exceed 1:48 (2.0833%).

c) **Landing.** A landing shall be provided at the top of a blended transition when the running slopes of the transition exceeds 1:48 (2.083%). The length of the landing in the direction of travel shall be a minimum of 48 inches. The width of landing shall be at least as wide as the blended transition. The slope of the landing shall not exceed 1:48 (2.083%) in any direction.

d) **Detectable Warning Surface.** A detectable warning surface in compliance with Governing Standards shall be placed at the flush transition to the roadway (face of the zero curb). The detectable warning surface shall extend the full length of the flush transition and shall have a minimum depth of three feet in the direction of travel, as measured perpendicular to the face of the curb.

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

iv. In-Line Transitions.

- a) **Slopes.** The running slope of the walking surface shall be in-line with the direction of sidewalk travel and shall not exceed 1:20 (5.0%).
- b) **Turning Space.** A turning space shall be provided at the bottom of the walking surfaces.
 - (i) **Size.** The turning space shall be a rectangle with sides at least as wide as the width of the adjoining walking surface. The turning space shall not be less than 48 inches square.
 - (ii) **Slopes.** The slope shall not exceed 1:48 (2.083%) in any direction.
- c) **Detectable Warning Surface.** A detectable warning surface in compliance with Governing Standards shall be placed within the turning space. The edge of the detectable warning surface shall be placed at the face of the curb. The detectable warning surface shall extend the full length of the flush transition (zero curb face) and shall have a minimum depth of three feet, as measured from the curb face.

v. Center Medians and Islands.

- a) **Specifications.** Center medians or curbed islands at crosswalks shall be cut-through so the walking surface of the passage through the median is at the same level as the surface of the roadway within the crosswalk.
 - (i) **Width.** The width of the passage shall be 60 inches or the same width as the crosswalk, whichever is greater.
 - (ii) **Slopes.** The running slope shall not exceed 1:20 (5.0%) and the cross slope shall not exceed 1:48 (2.083%).
- b) **Detectable Warning Surface.** Detectable warning surfaces shall not be placed on medians or islands with a width less than 72 inches, as measured parallel to the direction of pedestrian travel from face of curb to face of curb. On medians wider than 72 inches, detectable warnings shall be placed at the face of the curb. The detectable warning surface shall span the width of the opening and shall have a minimum depth of three feet, as measured from the face of the curb. Where passages are between 72 inches and 96 inches, the depth of the detectable warning surfaces shall be equally reduced to provide a clear space of 24 inches between the detectable warning surfaces, as measured in the direction of travel, but shall not be less than 24 inches.

3.8 CROSSINGS AND CROSSWALKS

- A. **Overview.** The portion of the roadway included within a crosswalk is a pedestrian facility that shall comply with the Governing Standards applicable to pedestrian walking surfaces.
- B. **Scoping.**

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

- i. **Crosswalks at Intersections.** Crosswalks are created by the prolongation or connection of sidewalks across roadways which intersect at approximately right angles. A crosswalk is the portion of the roadway within the prolongation or connection of the boundaries of the sidewalks across intersecting roadways. This includes crosswalks created by the prolongation of sidewalk boundaries across roadways that intersect in an “X” (Crossing), “T” (Tee), or “L” (Knuckle) configuration. Crosswalks at intersections may be unmarked or marked.
 - a) **Crosswalks Leading To Unprepared Surfaces.** Where the boundaries of sidewalks prolongate across an intersection and create a crosswalk, curb ramps shall be provided where the sidewalk or walk crosses the curb on the initiating side of the crosswalk. Curb ramps may also be required on the receiving side of a crosswalk where there is no prepared pedestrian walking surface.
 - (i) **Signalized Intersection.** If the intersection is signalized, a curb ramp and pedestrian refuge shall be provided on the receiving side of the crosswalk, where there is no prepared pedestrian surface. This curb ramp and pedestrian refuge shall provide access to pedestrian push buttons.
 - (ii) **Unsignalized Intersection.** If the intersection is unsignalized, curb ramps are not required on the receiving side of the crosswalk where there is no prepared pedestrian surface.
- ii. **Crosswalks at Midblock.** Crosswalks are created by the marking of the roadway for pedestrian use. A crosswalk is any portion of the roadway distinctly indicated for pedestrian crossing by lines or other markings on the surface.
- iii. **Pedestrian Crossing Restrictions.** Pedestrian crossing restrictions shall not be used to circumvent the requirement to provide accessible features in the PROW and shall not result in discrimination against the disabled community.
 - a) **New Crosswalks and Crossings.** Streets, intersections, and sidewalks shall be configured and designed for maximum connectivity and provide safe and convenient pedestrian travel. The creation of new crosswalks may be controlled through the design of streets, intersections, and sidewalks if all other requirements and guidelines for the provision of pedestrian facilities have been satisfied. It is the responsibility of the proposing party to demonstrate sufficient pedestrian access and connectivity to the satisfaction of the City of Chino. This determination shall be made by the Accessibility Coordinator and City Engineer.

C. Technical Requirements.

- i. **Width.** The full width of all crosswalks shall conform to the accessibility requirements for pedestrian walking surfaces. The full width of all crosswalks shall connect to a pedestrian circulation path on both ends.
 - a) **Marked Crosswalks.** Marked crosswalks shall have a minimum clear width of 6 feet inside the markings.

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

- b) **Unmarked Crosswalks and Crossings.** Unmarked crosswalks shall have a minimum clear width of the sidewalk or walk that created it.
- c) **Crossings at Shared Use Paths and Other Improved Pedestrian Paths.** Crossings or crosswalks that serve shared use or other improved pedestrian paths shall be the full width of the path leading to it.
- ii. **Slopes.** The full width of all crosswalks shall conform to the accessibility requirements for pedestrian walking surfaces.
 - a) **Running Slope.** The maximum running slope of a crosswalk, as measured in the direction of pedestrian travel, shall not exceed 1:20 (5.0%).
 - b) **Cross Slope.** The maximum cross-slope of a crosswalk, as measured perpendicular to the direction of pedestrian travel, shall not exceed 1:48 (2.083%).
 - (i) **Maneuvering Areas within Crosswalks.** The portion of the roadway where a pedestrian is required to maneuver or turn to stay safely within the crosswalk is a maneuvering area. *See Maneuvering Areas 3.6.A.ii*
 - (ii) **Marked Crosswalks with Changes in Directions.** Marked crosswalks that change directions contain maneuvering areas. *See Maneuvering Areas 3.6.A.ii*
- iii. **Striping.** The clear width of the crosswalk shall have no conflicting traffic control markings within it, other than the markings identifying the crosswalk itself.
 - a) **Crosswalks at Intersections.** Crosswalks at intersections may be marked or unmarked. Unmarked crosswalks shall not have changes in direction.
 - b) **Marked Crosswalks.** Crosswalks at mid-block locations shall be marked.
- iv. **Obstructions.** The clear width of the crosswalks shall have no obstructions lower than 84 inches for its full length.

3.9 DETECTABLE WARNING SURFACES

- A. **Specifications.** Detectable Warning Surfaces shall comply with the scoping and technical requirements provided in the CBC.
 - i. **Type.** Detectable warning surfaces shall be cast-in-place plates or panels, or mortar-set paving units or tiles. All DWS shall be vehicle-load rated. Surface applied DWS may be used only if they are liquid resin or acrylic based field built-up systems with a base layer of minimal thickness.
 - ii. **Color.** Detectable warning surfaces shall be “federal” or “safety” yellow.

3.10 PEDESTRIAN PUSH BUTTONS

- A. **Specifications.** Pedestrian push buttons (PPB) shall be accessible and shall comply with the requirements of the CAMUTCD.

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

- i. **PPB Operation.** PPBs installed as part of a new construction, alteration, or maintenance project shall be capable of being operated with a closed fist, without grasping or twisting.
 - a) **Remediation of Non-Compliant PPB.** “Thumb” buttons that require a pedestrian to use a fingertip to activate the button shall be replaced with an accessible PPB whenever maintenance, alterations, or repairs are performed that affect the PPB or its support pole.
- ii. **Height.** PPBs shall be installed so the top of the button is between 36 inches and 48 inches above the adjacent finished ground surface.
- iii. **Location.**
 - a) **PPB Distance from Curb Face.** The PPB shall be located between three and six feet from the adjacent curb face.
 - (i) **Exception.** Where the configuration of the existing improvements prevent the PPB from being installed within six feet of the curb face, the PPB may be located a maximum of 10 feet from the curb face. The PPB shall be installed no more than 10 feet from the curb face.
 - b) **PPB Distance from Crosswalk.** The PPB shall be located no further than 5 feet from the extension of the crosswalk line, or the longitudinal boundary of the crosswalk, that is located farthest from the center of the intersection.
 - (i) **Mid-Block Crosswalks.** At mid-block crossings, the PPB shall be located on the right-hand side of the crosswalk as oriented in the direction of pedestrian travel. The PPB shall be located no farther than 5 feet from the extension of the crosswalk line or longitudinal boundary that is located farthest from the center of the intersection.
 - c) **PPB Spacing from Other PPB**
 - (i) **Duplicate and Redundant PPB.** Duplicate or redundant PPB shall not be permitted. Only one PPB per user group and per direction of travel shall be mounted on a single pole.
 - (ii) **PPB for Different Directions of Travel.** Multiple PPB that activate pedestrian phases in different directions at a single corner or location shall have a minimum separation distance of 10 feet. PPB for different directions of travel shall not be placed on a single pole.
 1. **PPB for Different User Groups.** Multiple PPB that activate the traffic signal in different crossing directions for different users (bicycle, equestrian), are not required to comply with the requirement for minimum separation distances and may be mounted on a common pole.
 - (iii) **PPB for a Single Direction of Travel.**

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

1. **PPB for Different User Groups.** Multiple PPB that activate the traffic signal in the same crossing direction for different users (bicycle, equestrian), are not required to comply with the requirement for minimum separation distances and may be mounted on the same pole.
- iv. **Orientation.** The operable face of the PPB shall be oriented parallel to the crosswalk direction-of-travel which the PPB serves.
 - v. **Clear Ground Space.** A clear ground space shall be provided at each PPB.
 - a) **Approach.** The clear ground space may be positioned for either a forward approach to the face of the PPB, or for a parallel (side) approach to the face of the PPB.
 - (i) **Forward Approach.** The 30-inch-wide leading edge of the clear space at a forward approach shall abut the face of the PPB.
 1. **Distance Between PPB and Clear Ground Space.** No obstruction or distance between the edge of the clear space and the operable portion of the PPB is permitted.
 2. **Orientation of PPB to Clear Ground Space.** The PPB may be oriented anywhere within the 30" leading edge of the clear space. The clear ground space is not required to be on curb ramp side of the pole.
 - (ii) **Parallel or Side Approach.** One 48-inch-side of the clear ground space at a parallel, or side, approach shall be parallel to the face of the PPB.
 1. **Distance Between PPB and Clear Ground Space.** An obstruction less than 10 inches in depth and less than 34 inches in height, is permitted between the 48-inch side of the clear space and the face of the PPB. A PPB may be placed within a non-walking surface or curb ramp flare, or be separated from the clear space by a curb if the distance between the face of the PPB and the clear space is less than 10 inches.
 2. **Position of PPB to Clear Ground Space.** The PPB shall be located within the center 24 inches of the 48-inch side of the clear space. The clear ground space is not required to be on the curb ramp side of the pole.
 - b) **Dimensions.** The clear ground space shall be no less than 30 inches by 48 inches in size. Clear ground spaces may overlap landings and accessible routes.
 - c) **Slopes.** Clear ground spaces shall have slopes less than 2.083% (1:48) in all directions.
 - d) **Surface.** Changes in level are prohibited on the surface of the clear ground space.

CITY OF CHINO POLICY ON ACCESSIBLE PEDESTRIAN FACILITIES

- (i) **Overlap with Detectable Warning Surface.** Clear ground spaces shall not overlap or contain a detectable warning surface.

3.11 PEDESTRIAN SIGNAL PHASE

- A. Travel Route.** Where pedestrian travel routes on the sidewalk or in the crosswalk vary in length, the longest route for any direction of travel shall be used to calculate the corresponding walk phase, pedestrian clearance time, or total pedestrian phase.
- B. Walk Phase.** The walk phase shall be of adequate length to allow a pedestrian to travel the accessible route from the PPB clear ground space, to the landing at the top of the curb ramp, proceed down the curb ramp, and enter the roadway and shall include reaction time.
- C. Pedestrian Clearance Time.** The pedestrian clearance time is the time required to travel the length of the crosswalk from the departure curb to, at least, the far side of the travel way. The pedestrian clearance time is the sum of the Flashing Don't Walk Interval and a minimum 3.0 second buffer interval. Clearance time shall be calculated at a walking speed of no more than 3.5 feet per second.
- D. Total Pedestrian Crossing Phase Time.** The total pedestrian crossing phase time shall include the walk phase plus the pedestrian clearance time. The total pedestrian crossing time shall be calculated at a walking speed of no more than 3.0 feet per second from the pedestrian detector to, at least, the far side the traveled way.