

Franklin Transportation & Street Technical Standards Update



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March 2017



Agenda

- Typical Sections
- Public Right of Way Accessibility Guidelines
- Lighting Standards



Street Design Typical Sections

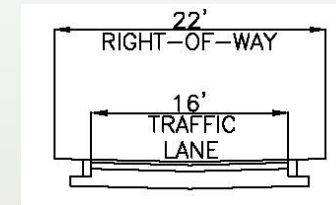
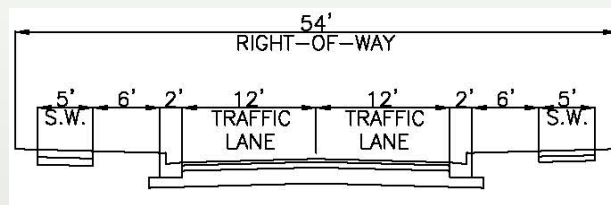
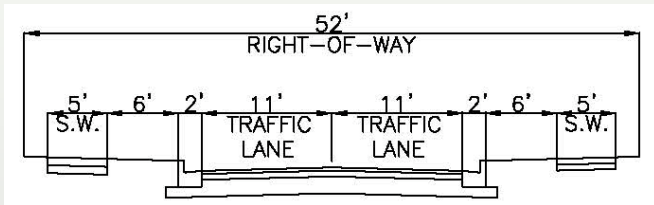
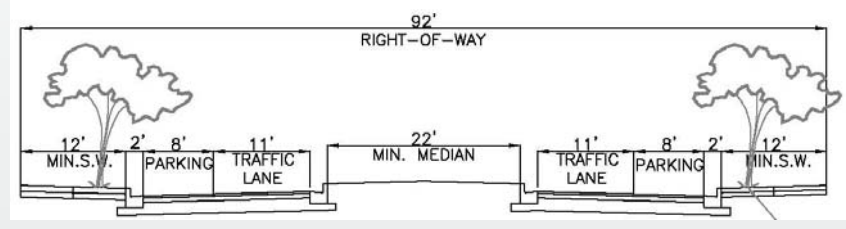
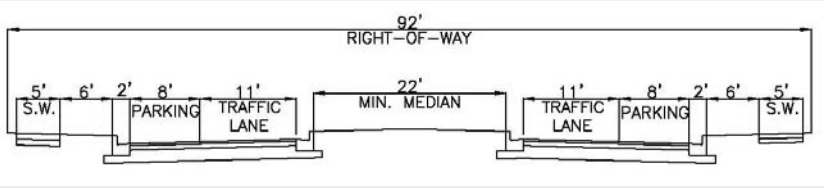
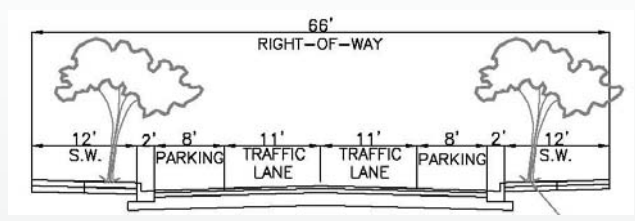
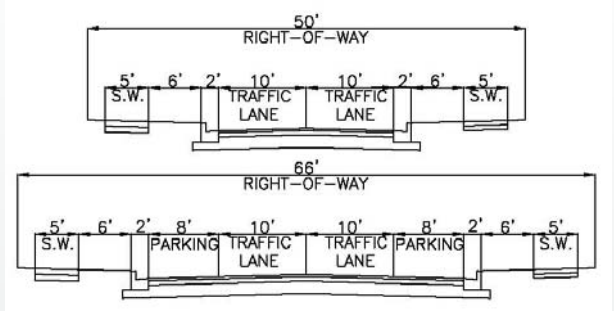


Table 2.2 (1) Street Typical Cross Section Elements by Classification

STD DWG #	Street Classification	Right-of-Way	Travel Lanes	Median	Bike Lanes	Sidewalks	Multi-Use Path	Parking Lane
TS-1	Major Arterial	136'	Four @ 12'	40'	Two @ 5'	Two @ 6'	No	No
TS-2	Major Arterial	132'	Four @ 12'	40'	No	One @ 6'	One @ 12'	No
TS-3	Minor Arterial	132'	Four @ 12'	36'	Two @ 5'	Two @ 6'	No	No
TS-4	Minor Arterial	128'	Four @ 12'	36'	No	One @ 6'	One @ 12'	No
TS-5	Major Collector	126'	Four @ 12'	30'	Two @ 5'	Two @ 6'	No	No
TS-6	Major Collector	122'	Four @ 12'	30'	No	One @ 6'	One @ 12'	No
TS-7	Minor Collector	79'	Three @ 12'	No	Two @ 5'	Two @ 6'	No	8' Parking Allowed
TS-8	Minor Collector	75'	Three @ 12'	No	Two @ 5'	Two @ 6'	No	8' Parking Allowed
TS-9	Minor Collector	67'	Two @ 12'	No	Two @ 5'	Two @ 6'	No	8' Parking Allowed
TS-10	Minor Collector	63'	Two @ 12'	No	No	One @ 6'	One @ 12'	8' Parking Allowed
TS-11	High Volume Local	54'	Two @ 12'	No	No	Two @ 5'	No	8' Parking Allowed
TS-12	Two Lane Intermediate Volume Local	52'	Two @ 11'	No	No	Two @ 5'	No	8' Parking Allowed
TS-13	Two Lane Low Volume Local	52'	Two @ 11'	No	No	Two @ 5'	No	8' Parking Allowed
TS-14	Alley	22'	One @ 16'	No	No	No	No	No

Traditional Neighborhood Development



Street Type	Design/ Posted Speed	ROW	Travel Way	On-street Parking	Curb Radius	Plantings	Sidewalk Width
Alley	15	22'	16'	NA	25'	NA	NA
TND ₁	20	50'	2 lanes 10'	8' - Optional	25'	6' strip min	5' min, both sides
TND ₂	20	92'	2 lanes 11'	8' - Optional	25'	6' strip min	5' min, both sides
TND-3	25	66'	2 lanes 11'	8' - Required	25'	Tree wells or planters	12' min both side
TND-4	25	92'	2 lanes 11'	8' - Required	25'	Tree wells or planters	12' min both side

Public Right of Way Accessibility Guidelines ("PROWAG")



Title II of the American with Disabilities Act (ADA) covers "public entities" to include any state and local governments.

Implemented by the Department of Justice (DOJ) and Federal Highway Administration

U.S. Access Board develops and maintains *ADA Accessibility Guidelines (ADAAG)* for design of new construction and alterations

U.S. Access Board is in the process of developing *Public Right-of-Way Accessibility Guidelines (PROWAG)*.

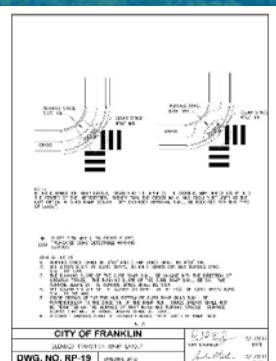
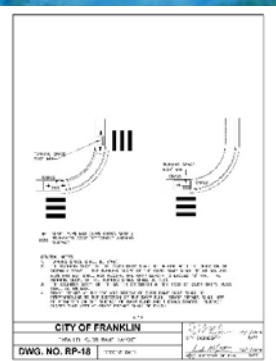
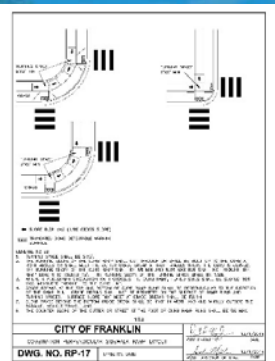
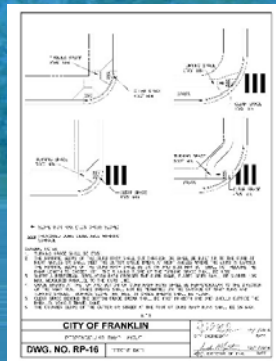
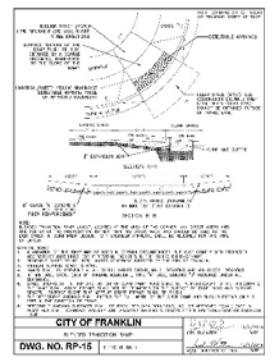
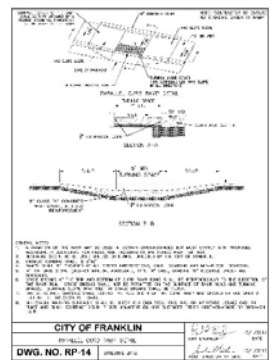
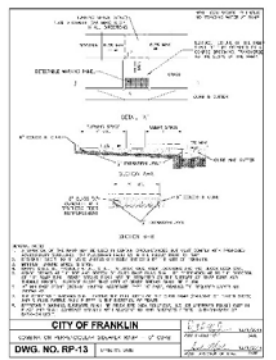
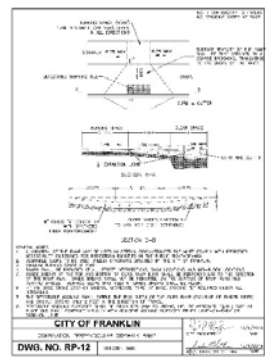
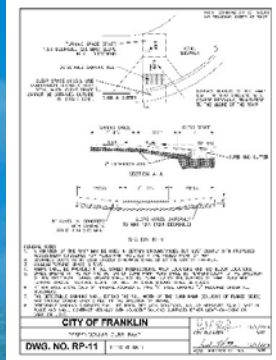
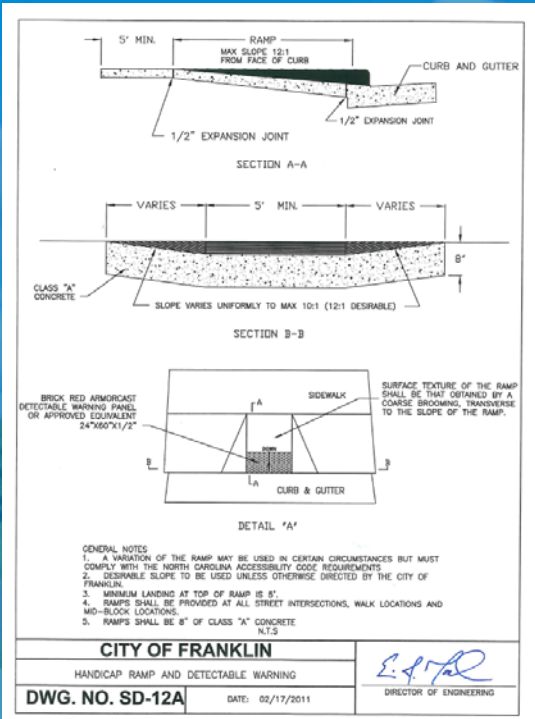
New construction and alterations must comply with provisions of the ADA standards for Accessible Design.

Ensure policies, practices and procedures avoid discrimination against individuals with disabilities.

Designate an individual to coordinate ADA compliance.

Old Standard Drawings

New Standard Drawings



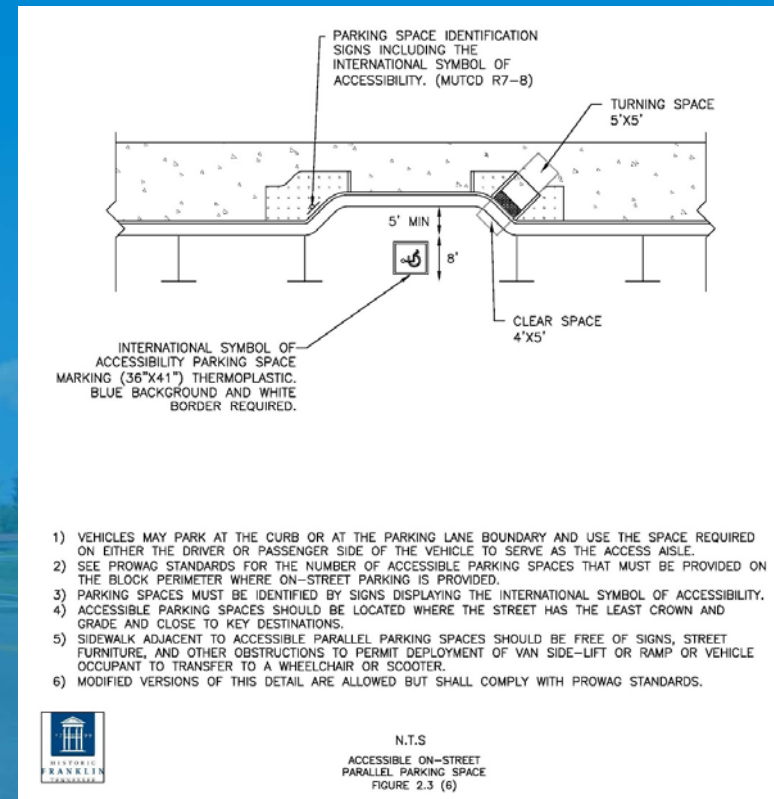


Public Right of Way Accessibility Guidelines ("PROWAG")

Where on-street parking is provided on the block perimeter and the parking is marked or metered, accessible parking spaces shall be provided in accordance with Table R214.

Table R214 On-Street Parking Spaces

Total Number of Marked or Metered Parking Spaces on the Block Perimeter	Minimum Required Number of Accessible Parking Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 and over	4 percent of total



Street Lights (9.4.1 General Design Standards)



(1) Underground Electric Service

(2) Fixture Type – LED

(3) Fixture Location

(a) Local Streets – Prescriptive Lighting

(b) Collector and Arterial Streets – *American National Standard Practice for Roadway Lighting* (ANSI/IESNA RP-8-14)

(4) General Layout Criteria

- a) A minimum of two lights shall be placed at every intersection with the exception of alleys. Intersections with alleys will only require one light. (See Figure 9.1 and 9.2)
- b) Signalized intersections may be lighted using combined streetlights and/or lighting located on the signal mast arms. A minimum of four lights shall be placed at every signalized intersection.
- c) Roundabout lighting shall be in accordance with recommendations of IES DG-19-08 “Design Guide for Roundabout Lighting.” Lighting shall make roundabout visible from a distance, and make key conflict areas more visible. If continuous roadway lighting is not present, transition lighting is to be provided.
- d) Railroad crossing lighting will conform to the latest version of the Railroad-Highway Grade Crossing Handbook (FHWA) and the Lighting Handbook (FHWA). If considered a conflict, luminaire supports shall be placed in areas of accessibility. Where placed in the clear-zone of a high speed road, they shall have a break-away base.
- e) All bridge underpasses, where vehicles, pedestrians, bicyclists, or equestrians may be present, shall require lighting.
- f) Where sidewalks are attached to the curb, street lights should be installed behind the sidewalk (in right-of-way or easement) with at least 1 foot clearance on Local streets (2 feet clearance on Major Collectors and Arterials). Poles within the clear zone shall be breakaway designs.
- g) For sidewalks detached from the curb, street lights should preferably be located between the curb and sidewalk and installed a minimum of 2 feet from the back of curb, and 2 feet clear from all walks (1 foot on Local Streets). Poles within the clear zone shall be breakaway designs.
- h) Non-Curbed Streets - On streets without curb and gutter, street lights should be placed no closer than ten (10) feet to the edge of the traveled way. Poles within the clear zone shall be breakaway designs.
- i) Street Lighting in Medians - Street trees shall not be placed within 30 feet of a street light. Understory trees shall be no closer than 15 feet to any street light. Poles within the clear zone shall be breakaway designs.

Street Lights (9.4.2 Local and Private Streets)

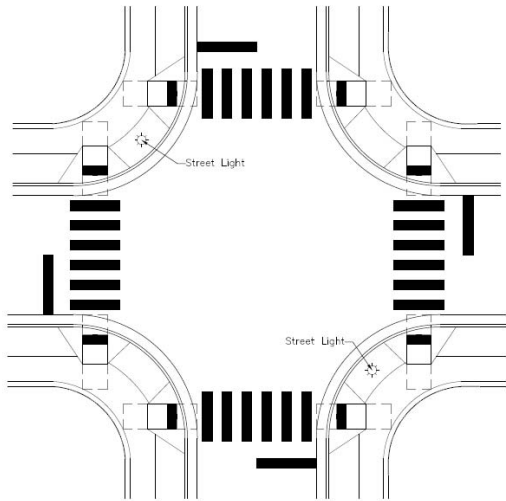


9.4.2 Prescriptive Lighting Standards

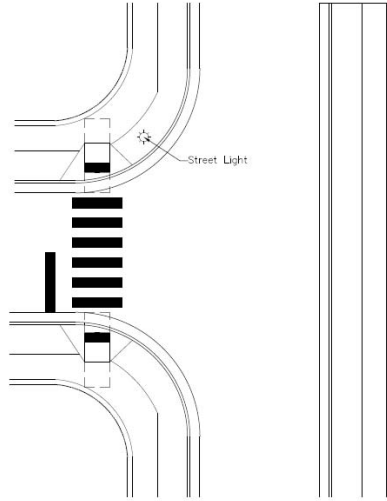
All local and private streets shall have prescriptive lighting based on the following standards:

- a) Max Spacing of light poles shall not exceed 300' with a clear line of sight within the ROW from one pole to the next (excluding landscaping). (See Figure 9.3)
- b) Street lighting shall be placed in every cul-de-sac and temporary dead end streets. (See Figure 9.1)
- c) Street lights shall be placed thirty (30) inches from curb face to center, in line with trees in the furnished zone between the sidewalk and the curb.
- d) Poles shall be placed a minimum of ten (10) feet from driveway aprons;
- e) Street light poles and foundations shall not be located over any other utilities. When locating proposed lighting, the designer should avoid possible conflicts with above-ground and below-ground utilities.
- f) Street light poles should be located along lot lines whenever possible.
- g) Streetlight mounting height shall be limited to 16 feet AFG.
- h) Street lighting shall be placed in every cul-de-sac and dead end street.
- i) It is desirable to locate light poles along lot lines whenever possible.
- j) Upon the request of any owner of property to which this subsection applies, the City Engineer may approve an alternative prescriptive lighting plans. In making this determination, the City Engineer may consider specific design constraints such as large lot subdivisions.

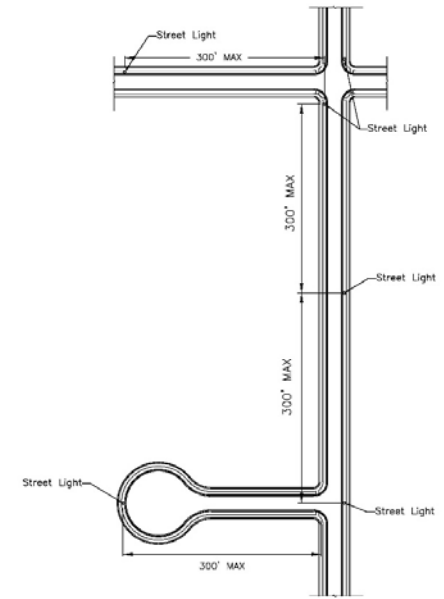
Street Lights (9.4.2 Local and Private Streets)



N.T.S.
FIGURE 9.4 (1)
NON-SIGNALIZED INTERSECTION PRESCRIPTIVE LIGHTING



N.T.S.
FIGURE 9.4 (2)
TEMPORARY CUL-DE-SAC



N.T.S.
FIGURE 9.4 (3)
LOCAL AND PRIVATE STREET PRESCRIPTIVE LIGHTING





Street Lights (Section 9.5 and 9.6)

9.5 Record Drawings

Project applicant or designee shall provide record drawings that depict construction to the City prior to the request for City to acceptance.

MTEMC Owned Street Lights – All Fixture locations.

COF Owned Street Lights - Street Light record drawings shall provide the following: Service connection points, conduit locations (including distance from face of curb and depth), and all fixture locations.

9.6 City of Franklin Approved Street Light Options

Local and Private Streets – See MTEMC LED Street lights for all local and private roads

Downtown Historic Franklin – See Approved COF Streetscape Lighting fixtures. Lighting fixtures to be approved by the Department Review Team.

Arterial and Collector Streets – See Approved COF lighting fixtures.

Street Lights Standard Drawings

