**EXPANSION** JOINTS **ROADWAY** OR SHOULDER ROADWAY OR SHOULDER NOTE: EDGE OF MAILBOX SHALL NOT OVERHANG BEYOND THE BACK OF THE CURB. NOR SHALL THE MAILBOX OVERHANG THE SIDEWALK SUCH THAT THE USABLE WIDTH IS LESS THAN 4 FEET. IF NEEDED, REMOVAL AND RESETTING MAILBOXES TO BE INCLUDED IN THE COST OF SIDEWALK.

**EXPANSION JOINT EXPANSION GROOVE JOINT EVERY 25' TO 30'** 1/4" RADIUS **JOINT** SEE DETAIL **EXPANSION JOINT-**ON CORNER SEE NOTE (E) **SEE DETAIL SIDEWALK** COMPACTED **MATERIAL** (SEE NOTE (N) **EXPANSION JOINT DETAIL SERVICE CURB OR CURB GRASS STRIP AND GUTTER** POLE

**EXPANSION** 

**GROOVE JOINT** 

SEE DETAIL

CURB OR CURB AND

**GUTTER JOINT** 

SHOULD MATCH

TO SIDEWALK JOINT

**ROADWAY** 

OR SHOULDER

**CURB AND** 

**GUTTER** 

2'-6"

ROADWAY

OR SHOULDER

LONGITUDINAL

SEE NOTE ()

**GROOVE** 

**JOINTS** 

**CURB AND** 

**GUTTER** 

2'-6"

· Q. · Q. · Q. · Q. · Q.

SERVICE

POLE

TYPICAL POLE

**FOUNDATION** 

(SEE NOTE)

**GRASS STRIP** 

NOTE: IF SERVICE POLE IS PLACED IN GRASS STRIP THE POLE SHALL HAVE MIN. 3' OFFSET FROM

TRAVELLED LANE. MINIMUM 36" DIAMETER AND 15' DEEP FOUNDATION SPACE SHALL BE

EVALUATED TO ELIMINATE CONFLICTS. SEE STANDARD TRAFFIC OPERATION DRAWINGS

SERVICE APPURTENANCES (LARGE SIGNS, STRUCTURES, SIGNAL, LUMINARY AND UTILITY

SPACE, PREFERABLY OUTSIDE THE SIDEWALK AREA AND INSIDE THE RIGHT-OF-WAY.

**SECTION C-C** 

POLES 2' DIAMETER OR LARGER) SHALL BE PLACED OUTSIDE THE PEDESTRIAN ACCESSIBLE

-EXPANSION

MIN. 5'-0" SIDEWALK

CROSS SLOPE 1.5 % MAX.

FOR SIDEWALK = 1' (MIN.)

FOR SHARED-USE PATH = 2' (MIN.)

MIN 5' SIDEWALK

OR 10' SHARED- USE PATH

CROSS SLOPE 1.5 % MAX.

COMPACTED MATERIAL

(SEE NOTE (N))

COMPACTED

MATERIAL (SEE NOTE (N))

**EXPANSION** 

JOINT

**SECTION B-B** 

TYPICAL SIDEWALK CROSS SECTION

WITHOUT GRASS STRIP

- 12" DESIRED

MIN.

**JOINT** 

**PLAN VIEW** 

**EXPANSION JOINT** 

**EVERY 25' TO 30'** 

SEE NOTE (E)

**VARIABLE** 

2' MIN.

GRASS STRIP

**SECTION A-A** 

TYPICAL SIDEWALK CROSS SECTION

WITH GRASS STRIP

20" - 24"

**EXPANSION** 

**JOINT** 

SEE DETAIL

DRAINAGE

**CURB OR CURB** 

**AND GUTTER** 

**CURB AND** 

**GUTTER** 

2'-6"

41"-45"

SIDEWALK WITH GRASS STRIP

В

**PLAN VIEW** 

SIDEWALK WITHOUT GRASS STRIP

SERVICE APPURTENANCES SHALL PROVIDE MINIMUM 4' CLEAR PATH.)

**COMPACTED** 

MATERIAL

(SEE NOTE (N)

(NOTE: WHEN NEEDED DUE TO EXTREME SITE CONDITIONS THE PLACEMENT OF

FOR SIDEWALK = 1' (MIN.)

FOR SHARED-USE PATH = 2' (MIN.)

MIN 5' SIDEWALK

OR 10' SHARED- USE PATH

CROSS SLOPE 1.5 % MAX.

**MAINTAIN MIN 4'** CLEAR PATH AT MAIL BOX LOCATION

CROSS SLOPE 1.5 % MAX.

**MAILBOX DETAIL** 

UTILITY

**POLE** 

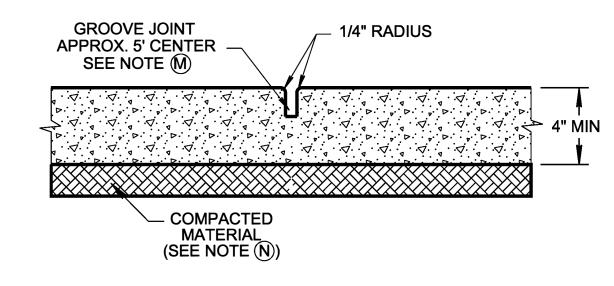
**MAINTAIN MIN 4' CLEAR** 

PATH AT FIXED OBJECT

LOCATION (LIGHT

POLE/BENCH ETC.)

SIDEWALK



#### HAND TOOL GROOVE JOINT DETAIL

## REFERENCED STANDARD DRAWINGS

- SEE T-M-4, FOR CROSS WALK MARKING
- SEE MM-CR SERIES FOR CURB RAMP DETAILS
- SEE MM-BPR-1, FOR PEDESTRIAN RAIL REQUIREMENTS & S-PL-6, FOR GUARDRAIL PLACEMENT
- SEE MM-SW-2, FOR ALTERNATE DETAILS FOR CONCRETE SIDEWALK (REHABILITATION)
- SEE RP-SC-1, FOR 6" SLOPING CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS
- SEE RP-VC-10 OR 11, FOR VERTICAL CONCRETE CURB AND CONCRETE CURBS AND GUTTER DETAILS
- SEE MM-PM-1 THRU MM-PM-5, FOR BIKE LANE/ROUTE PAVEMENT MARKINGS
- SEE RP-D-15 & 16 FOR CONCRETE DRIVEWAYS
- SEE MM-TS-2 FOR PEDESTRIAN FACILITY LATERAL OFFSETS/ BUFFER GUIDANCE.
- SEE MM-TS-3 FOR SHARED USE TYPICAL SECTIONS

#### **GENERAL NOTES**

- A LWAYS PLACE SIDEWALK AS FAR AS AWAY FROM THE TRAVELLED WAY WHEN POSSIBLE FOR SPECIFICATIONS SEE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION.
- WHERE IT BECOMES NECESSARY TO REMOVE PARTS OF EXISTING CONCRETE SIDEWALKS OR RAMPS, THE RESULTING EDGES SHALL BE CUT TO A NEAT LINE, AND ANY OFFSETS IN SUCH LINES SHALL BE MADE AT RIGHT ANGLES.
- SIDEWALK WIDTHS DO NOT INCLUDE THE SIX INCH CURB WIDTH OF PROPOSED TOP OF CURB.
- D MAXIMUM SIDEWALK CROSS SLOPE IS 1.5 %. ALL SIDEWALKS SHALL HAVE A BROOM FINISH AND SHALL BE 5" THICK UNLESS IT IS DRIVEABLE SIDEWALK WHICH SHALL BE 6" THICKNESS, THE CONCRETE SHALL BE CLASS "A" AT 3000 PSI.
- EXPANSION JOINTS ARE TO BE PLACED 25 TO 30 FEET APART DEPENDING ON TRANSVERSE JOINT MARKINGS AND NEED TO MATCH CURB EXPANSION JOINT WHERE SIDEWALK IS BUILT DIRECTLY AGAINST CURB, OR AS DIRECTED BY THE ENGINEER WHERE THE PROPOSED SIDEWALK IS IN CONTACT WITH THE STREET RETURNS, ON BUILDING LINES PRODUCED AT STREET INTERSECTIONS WHERE WALKS LEAD TO HOUSE OR OTHER ENTRANCES AND AN OTHER LOCATIONS WHERE STRESSES MAY DEVELOP.
- CONCRETE JOINT MATERIAL TO BE FLUSH WITH THE SIDEWALK SURFACE. ONE INCH PREFORMED FILLER IN ACCORDANCE WITH SECTION 701.06 OF THE STANDARD SPECIFICATIONS.
- G ONE INCH EXPANSION JOINTS ARE TO BE PLACED WHERE THE PROPOSED SIDEWALK IS IN CONTACT WITH CIRCULAR CURBS. BUILDINGS AND/OR RETAINING WALLS.
- (H) HALF INCH EXPANSION JOINTS ARE TO BE USED AT ALL OTHER LOCATIONS.
- LONGITUDINAL JOINT MARKINGS WILL NOT BE REQUIRED ON SIDEWALKS THAT ARE 5 FEET OR LESS IN WIDTH. ONE LONGITUDINAL JOINT MARKING WILL BE REQUIRED ON SIDEWALKS OVER 5 FEET BUT

LESS THAN 9 FEET IN WIDTH. TWO LONGITUDINAL JOINT MARKINGS WILL BE REQUIRED ON SIDEWALKS OVER 9 FEET BUT LESS THAN 12 FEET IN WIDTH.

- TRANSVERSE JOINT MARKERS ARE TO BE MADE TO FORM BLOCKS AS NEARLY TO SQUARE AS PRACTICAL.
- WHEN LEAVING A SQUARE OPENING IN THE SIDEWALK, THE LENGTH OF THE SIDE OF THE SQUARE OPENING SHOULD BE EQUAL TO THE DIAMETER OF THE FIXED OBJECT PLUS SIXTEEN INCHES. IT WILL BE BORDERED BY HALF INCH EXPANSION JOINT.
- WHEN NEW SIDEWALK IS PLACED ADJACENT TO EXISTING SIDEWALK THE CONTRACTOR SHALL CORRECT ALL ABRUPT CHANGES AND SLOPES TO PROVIDE A SMOOTH TRANSITION FROM THE LIMIT OF CONSTRUCTION TO EXISTING PEDESTRIAN FACILITY.
- (M) DIVIDE THE SURFACE OF SIDEWALKS INTO BLOCKS USING A GROOVING TOOL. SPACE THE GROOVES APPROXIMATELY 5 FEET APART TO PRODUCE SQUARE BLOCKS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- SHAPE AND COMPACT THE SUBGRADE TO A FIRM, EVEN SURFACE IN REASONABLY CLOSE CONFORMITY WITH THE GRADE AND CROSS-SECTION SHOWN ON THE PLANS. REMOVE ALL SOFT AND YIELDING MATERIAL, REPLACE IT WITH ACCEPTABLE MATERIAL, AND COMPACTED TO A 98% PROCTOR WITH REPORTS SUBMITTED TO DEVELOPMENT SERVICES

). SUBGRADE SHALL BE COVERED WITH FIVE INCHES (5") OF TDOT MINERAL AGGREGATE BASE, TYPE B OVER NON-DRIVEABLE SIDEWALK AND SIX INCHES (6") OF TDOT MINERAL AGGREGATE BASE TYPE B OVER DRIVEABLE SIDEWALK (SIDEWALK RUNNING THROUGH DRIVEWAYS, ETC.)

REV. 06-28-19: REVISED GENERAL NOTES (B), (D), (G) & (H) ALONG WITH DETAIL

NOTES FOR "TYPICAL SIDEWALK CROSS

SERVICE APPURTENANCES" AND

MAILBOX DETAIL.

**DETAIL AND NOTE.** 

"SIDEWALK CONSTRUCTION DETAILS WITHOUT GRASS STRIP". ADDED NOTE TO

REV. 03-01-2023: SIDEWALK PLAN VIEWS

REV. 07-07-2023: REVISED MAILBOX

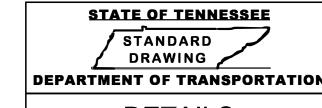
REV. 09-12-2025 EDITED FOR HAMILTON

COUNTY TN SPECEFIC REQUIREMENTS

AND GROOVE JOINT DETAIL WERE ADDED REMOVED GENERAL NOTE (E), AND ADDED GENERAL NOTES (M) AND (N) SIDEWALK CONSTRUCTION DETAIL WAS REMOVED. SECTION C-C NOTE WAS

. CONCRETE SIDEWALK FORMS SHALL BE REQUIRED TO BE INSPECTED BEFORE THE POURING OF **CONCRETE SIDEWALK.** 

(Replaced Std Dwg RP-S-7)



**DETAILS FOR CONCRETE** SIDEWALK

01-07-2019

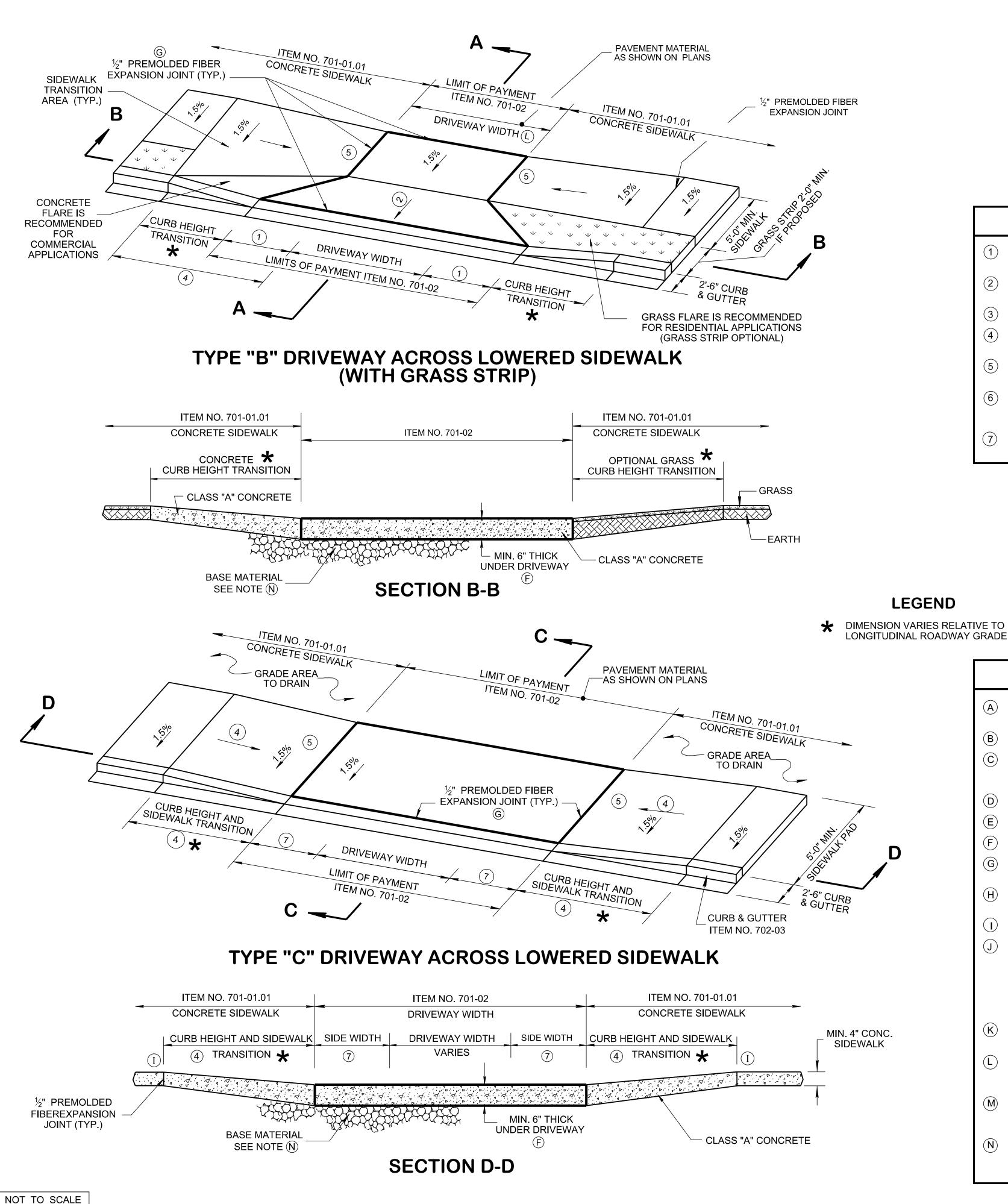
MM-SW-1

WITH GRASS STRIP AND SERVICE APPURTENANCES

## NOT TO SCALE

# TYPICAL SIDEWALK CROSS SECTION

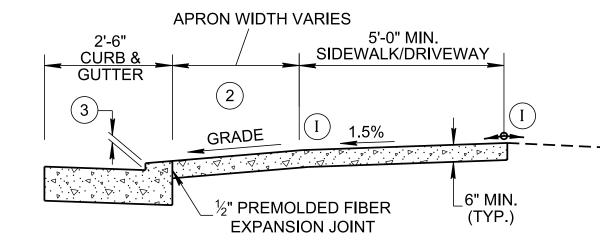
T-SG-9 AND T-SG-10 FOR MORE INFORMATION.



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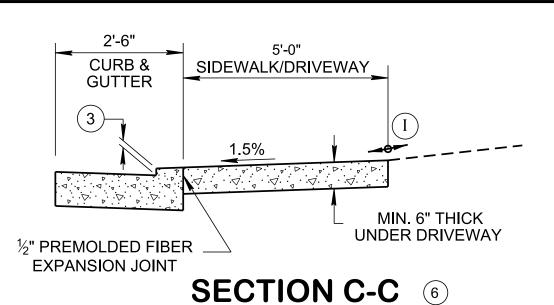
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SECTION A-A 6

### **FOOTNOTES**

- SIDE FLARE WIDTH SHOULD BE A MINIMUM 7'-0" FOR COMMERCIAL DRIVEWAYS. SIDE FLARE WIDTH SHOULD BE A MINIMUM 3'-6" FOR RESIDENTIAL DRIVEWAYS.
- DRIVEWAY RAMP GRADE VARIES, 15% MAX. (10% RECOMMENDED) APRON GRADE FOR RESIDENTIAL DRIVEWAYS. 8% MAX. (5% RECOMMENDED) APRON GRADE FOR COMMERCIAL DRIVEWAYS.
- HEIGHT OF LOWERED CURB SHALL BE 2.25 INCHES. SEE STD DWG RP-VC-10 & RP-VC-11.
- THE SLOPE OF THE SIDEWALK AND/OR CURB HEIGHT TRANSITION VARIES TO A MAXIMUM OF 8.33% LENGTH OF TRANSITION IS RELATIVE TO THE LONGITUDINAL ROADWAY GRADE
- COMMERCIAL DRIVEWAY ENTRANCE TYPICALLY (MAX. 40' WIDE) MAY REQUIRE DETECTABLE WARNING SURFACES IF ENTRANCE SERVES MORE THAN 400 VEHICLES PER DAY. SEE STD. DWG. NOS. MM-CR- SERIES FOR DETAILS
- 3R PROJECTS MAY REQUIRE SLOPE CORRECTION, PARALLEL CROSS-WALK MARKINGS (ESPECIALLY AT TWO WAY DRIVEWAY ENTRANCES), AND DETECTABLE DOME SURFACE TO MAINTAIN CONTINUITY AT COMMERCIAL DRIVE ENTRANCES. ADDITIONAL SIGNS (WATCH FOR PED) MAY BE ADDED AT DRIVEWAYS BY THE DIRECTION OF AN ENGINEER IF NEEDED.
- SIDE WIDTH SHOULD BE A MINIMUM 7'-0" FOR COMMERCIAL DRIVEWAYS. SIDE WIDTH SHOULD BE A MINIMUM 3'-6" FOR RESIDENTIAL DRIVEWAYS.



### **GENERAL NOTES**

- (A) DUE TO THE ELEVATION CHANGE FOR PEDESTRIANS ON THE SIDEWALK, THIS APPLICATION IS UNDESIRABLE AND IS TO BE USED IN LIMITED APPLICATIONS. SEE RP-D-15 FOR THE PREFERRED DRIVEWAY TYPE.
- 5'-0" MINIMUM SIDEWALK WITH A MAXIMUM CROSS SLOPE OF 1.5% THROUGH DRIVEWAYS
- DESIGNER TO CHECK GUTTER FLOW DEPTH AT DRIVEWAY LOCATIONS TO ASSURE THAT THE DESIGN FLOW DOES NOT OVERTOP THE SIDEWALK AREA. IF OVERTOPPING OCCURS, PLACE AN INLET AT THE UPSTREAM SIDE OF THE DRIVEWAY OR PERFORM OTHER DESIGN MITIGATION
- THE SLOPE OF THE LANDING AREA SHALL NOT EXCEED 1.5% IN THE SIDEWALK AREA.
- DRIVEWAYS TO BE BUILT COMPLETE OR IN PART AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- ALL CONCRETE DRIVEWAYS TO BE 6" UNIFORM THICKNESS, UNLESS OTHERWISE SHOWN ON PLANS.
- EXPANSION JOINTS ARE TO BE PLACED AS INDICATED ON THE PLANS. WHEN THE BACK OF THE DRIVEWAY ABUTS AGAINST A CONCRETE DRIVEWAY OR BUILDING. AN ADDITIONAL EXPANSION JOINT WILL BE PLACED AT THAT LOCATION.
- THE ROADWAY DESIGNER SHALL CONSIDER THE USE OF A CATCH BASIN ON EITHER SIDE OF DRIVEWAY. CAREFUL CONSIDERATION TO THE PLACEMENT OF CATCH BASINS SHALL BE TAKEN IF THE DRIVEWAY IS IN A VERTICAL SAG CURVE.
- ALGEBRAIC DIFFERENCE NOT TO EXCEED 10.0%.
- (J) PAY ITEMS:

ITEM NO: 303-01, MINERAL AGGREGATE, TYPE A BASE, GRADING D, PER TON. ITEM NO: 701-01.01, CONCRETE SIDEWALK (4"), PER S.F. PER S.F. CONCRETE DRIVEWAY, ITEM NO: 701-02, CONCRETE DRIVEWAY (8") PER S.F. ITEM NO: 701-02.02, ITEM NO: 702-03, CONCRETE COMBINED CURB & GUTTER, PER C.Y.

- WHEN MORE THAN 2 DRIVEWAYS ARE PROPOSED, USE TYPE "A" DRIVEWAY AS SHOWN ON STANDARD DRAWING RP-D-15 TO REDUCE ROLLER COASTER EFFECT FOR PEDESTRIANS.
- TYPICAL DRIVEWAY WIDTHS ARE 12' (14' TWO WAY) FOR RESIDENTIAL AND 24' (40' MAX.) FOR COMMERCIAL REFER TO SECTION 5 (ACCESS DESIGN) IN THE MANUAL FOR CONSTRUCTING DRIVEWAY ENTRANCES ON STATE HIGHWAYS (2015).
- ALL SIDEWALKS SHALL HAVE A MINIMUM CONCRETE THICKNESS OF 4". THE SIDEWALK TRANSITION THICKNESS IS DEPEND ON THE DRIVEWAY AND THE SIDEWALK THICKNESSES, THE COST OF THE SIDEWALK TRANSITION WILL BE INCLUDED IN THE PAY ITEM NO. OF 701-01.01.
- MINIMUM 4" MINERAL AGGREGATE BASE MATERIAL ITEM NO. 303-01 SHALL BE INSTALLED UNDER NEW CONCRETE DRIVEWAYS. SITE SPECIFIC PAVEMENT DESIGN MAY BE REQUIRED FOR COMMERCIAL DRIVEWAYS USED AS A DELIVERY ACCESS AS WELL. A DRIVEWAY PAVEMENT DESIGN WITH 6" CONCRETE PAVEMENT AND 4" AGGREGATE DEPTH MAY BE LIMITED TO LIGHT COMMERCIAL VEHICULAR TRAFFIC.

■ APPROVED BY FHWA (ALL OTHERS APPROVED BY TDOT)

STATE OF TENNESSEE STANDARD DRAWING DEPARTMENT OF TRANSPORTATION

REV. 7-15-08: UPDATED SIDEWALK

■ REV. 4-8-16: ADDED ITEM NUMBERS. UPDATED SLOPES AND DIMENSIONS.

REV. 07-16-18: ADDED NOTES TO CONC

FLARE AND GRASS FLARE IN ISOMETRIC

VIEW. ADDED GENERAL NOTE (M) & (N)

REV. 01-07-19: ADDED LIMITS FOR ITEM

NO. 701-02. ADJUSTED LOCATION OF

GENERAL NOTE NO'S. (J) & (N) ON

REV. 10-16-20: ADDED GENERAL NOTE () MINERAL AGGREGATE ITEM NUMBER AND

BASE MATERIAL ON SECTIONS B-B AND D-D

REV. 06-15-21: REVISED AND MERGED GENERAL NOTES (L) AND (M). ADJUSTED

LOCATION OF GENERAL NOTE NO'S.

ADDED. SIDE WIDTH AND FOOTNOTE

NUMBER 7 WERE ADDED ON TYPE C

DRIVEWAY AND ON SECTION D-D.

ADDED PAY ITEM NO. 701-02.02.

REVISED GENERAL NOTES (G) (M) AND (N)

REV. 10-29-2021: FOOTNOTE NUMBER 7 WAS

DETAILS. REDREW SHEET.

**DIMENSIONS** 

UPDATED NOTES.

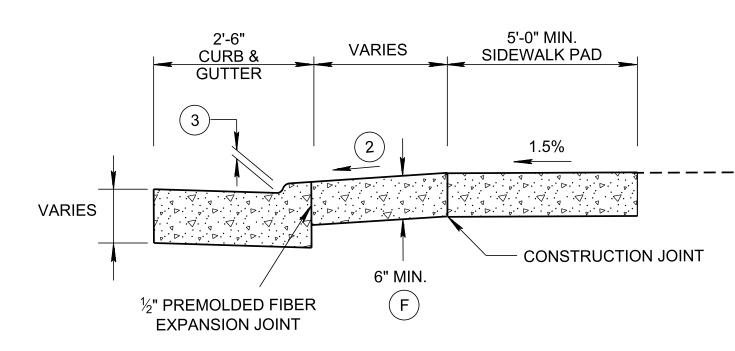
**DETAILS OF LOWERED STANDARD** CONCRETE **DRIVEWAYS** 

02-15-2007

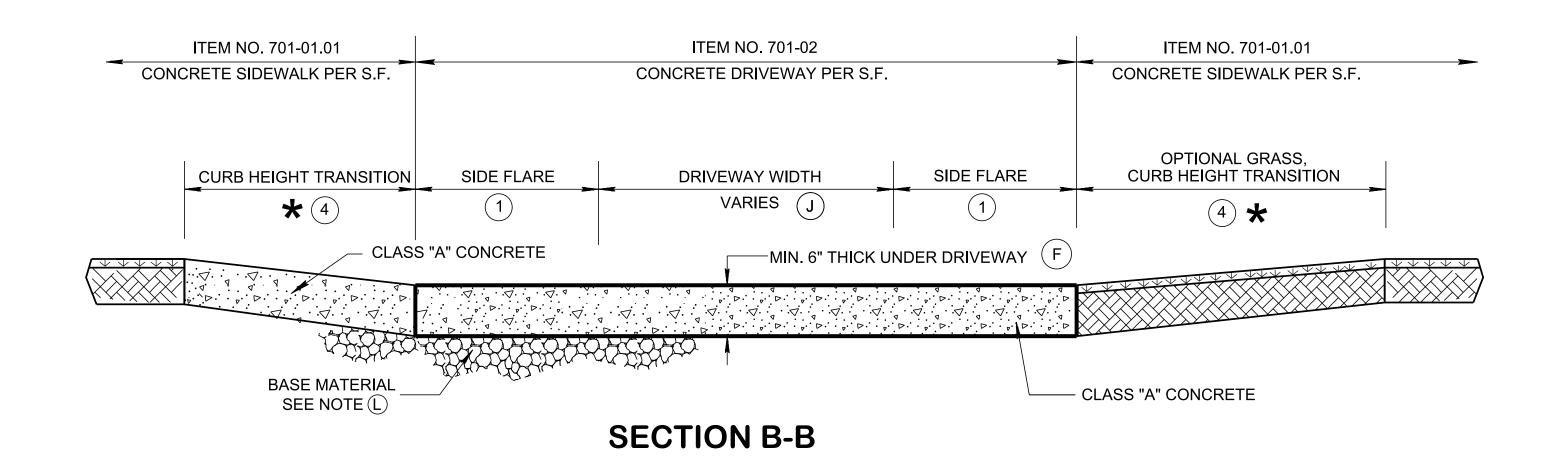
RP-D-16

#### **LEGEND**

DIMENSION VARIES RELATIVE TO LONGITUDINAL ROADWAY GRADE.



#### **SECTION A-A**



REV. 7-15-08: UPDATED SIDEWALK **DIMENSIONS** 

■ REV. 4-8-16: ADDED ITEM NUMBERS. UPDATED SLOPES AND DIMENSIONS. UPDATED NOTES.

REV. 07-16-18: ADDED NOTES TO CONC. FLARE AND GRASS FLARE IN ISOMETRIC VIEW. ADDED GENERAL NOTE (K). CHANGED REFERENCED STD. DWG. FROM RP-NMC-10 TO RP-VC-10. ADDED NOTE (A) AND RENUMBERED THE REST. ADDED SPECIAL NOTE. REDREW SHEET.

■ REV. 01-07-19: CORRECTED SPELLING. REDREW SHEET.

REV. 10-16-20: ADDED GENERAL NOTE M ADDED MINERAL AGGREGATE ITEM NUMBER AND REFERENCE NOTE ON SECTION B-B.

REV. 06-15-21: REVISED AND MERGED GENERAL NOTES (J) AND (K). ADJUSTED LOCATION OF GENERAL NOTE NO'S. REVISED GENERAL NOTES (G) (K) AND (L). ADDED PAY ITEM NO'S. 701-01.01, 701-02.02 AND 702-03.

#### **FOOTNOTES**

- SIDE FLARE WIDTH SHOULD BE A MINIMUM 7'-0" FOR COMMERCIAL DRIVEWAYS. SIDE FLARE WIDTH SHOULD BE A MINIMUM 3'-6" FOR RESIDENTIAL DRIVEWAYS.
- DRIVEWAY RAMP GRADE VARIES, 15% MAX. (10% RECOMMENDED) APRON GRADE FOR RESIDENTIAL DRIVEWAYS. 8% MAX. (5% RECOMMENDED) APRON GRADE FOR COMMERCIAL DRIVEWAYS.
- HEIGHT OF LOWERED CURB SHALL BE 2.25 INCHES. SEE STD DWG RP-VC-10 & RP-VC-11.
- THE SLOPE OF THE SIDEWALK AND/OR CURB HEIGHT TRANSITION VARIES TO A MAXIMUM OF 8.33% LENGTH OF TRANSITION IS RELATIVE TO THE LONGITUDINAL ROADWAY GRADE.
- COMMERCIAL DRIVEWAY ENTRANCE TYPICALLY (MAX. 40' WIDE) MAY REQUIRE DETECTABLE WARNING SURFACES IF ENTRANCE SERVES MORE THAN 400 VEHICLES PER DAY. SEE STD. DWG. NOS. MM-CR- SERIES FOR DETAILS.
- 3R PROJECTS MAY REQUIRE SLOPE CORRECTION, PARALLEL CROSS-WALK MARKINGS (ESPECIALLY AT TWO WAY DRIVEWAY ENTRANCES), AND DETECTABLE DOME SURFACE TO MAINTAIN CONTINUITY AT COMMERCIAL DRIVE ENTRANCES. ADDITIONAL SIGNS (WATCH FOR PED) MAY BE ADDED AT DRIVEWAYS BY THE DIRECTION OF AN ENGINEER IF NEEDED.

#### **GENERAL NOTES**

- THIS TYPE OF DRIVEWAY IS PREFERRED OVER THE LOWERED TYPE AS SHOWN ON RP-D-16 BECAUSE THE ELEVATION OF THE SIDEWALK REMAINS A CONSTANT FOR PEDESTRIANS.
- 5'-0" MINIMUM SIDEWALK WITH A MAXIMUM CROSS SLOPE OF 1.5% THROUGH DRIVEWAYS.
- DESIGNER TO CHECK GUTTER FLOW DEPTH AT DRIVEWAY LOCATIONS TO ASSURE THAT THE DESIGN FLOW DOES NOT OVERTOP THE SIDEWALK AREA. IF OVERTOPPING OCCURS, PLACE AN INLET AT THE UPSTREAM SIDE OF THE DRIVEWAY OR PERFORM OTHER DESIGN MITIGATION.
- THE SLOPE OF THE LANDING AREA SHALL NOT EXCEED 1.5% IN THE SIDEWALK AREA.
- DRIVEWAYS TO BE BUILT COMPLETE OR IN PART AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- ALL DRIVEWAYS TO BE 6" UNIFORM THICKNESS, UNLESS OTHERWISE SHOWN ON PLANS.
- EXPANSION JOINTS ARE TO BE PLACED AS INDICATED ON THE PLANS. WHEN THE BACK OF THE DRIVEWAY ABUTS AGAINST A CONCRETE DRIVEWAY OR BUILDING. AN ADDITIONAL EXPANSION JOINT WILL BE PLACED AT THAT LOCATION.
- THE ROADWAY DESIGNER SHALL CONSIDER THE USE OF A CATCH BASIN ON EITHER SIDE OF THE DRIVEWAY, CAREFUL CONSIDERATION TO THE PLACEMENT OF CATCH BASINS SHALL BE TAKEN IF THE DRIVEWAY IS IN A VERTICAL SAG CURVE.
- PAY ITEMS:

ITEM NO:	303-01,	MINERAL AGGREGATE, TYPE A BASE, GRADING D,	PER TO
ITEM NO:	701-01.01,	CONCRETE SIDEWALK (4"),	PER S.F
ITEM NO:	701-02,	CONCRETE DRIVEWAY,	PER S.F
ITEM NO:	701-02.02,	CONCRETE DRIVEWAY (8"),	PER S.F
ITEM NO:	702-03,	CONCRETE COMBINED CURB AND GUTTER,	PER C.Y

- TYPICAL DRIVEWAY WIDTHS ARE 12' (14' TWO WAY) FOR RESIDENTIAL AND 24' (40' MAX.) FOR COMMERCIAL. REFER TO SECTION 5 (ACCESS DESIGN) IN THE MANUAL FOR CONSTRUCTING DRIVEWAY ENTRANCES ON STATE HIGHWAY (2015).
- ALL SIDEWALKS SHALL HAVE A MINIMUM CONCRETE THICKNESS OF 4". THE SIDEWALK TRANSITION THICKNESS IS DEPENDENT UPON THE DRIVEWAY AND SIDEWALK THICKNESSES, THE COST OF THE SIDEWALK TRANSITION WILL BE INCLUDED IN THE PAY ITEM NO. OF 701-01.01.
- MINIMUM 4" MINERAL AGGREGATE BASE MATERIAL ITEM NO. 303-01 SHALL BE INSTALLED UNDER NEW CONCRETE DRIVEWAYS. SITE SPECIFIC PAVEMENT DESIGN MAY BE REQUIRED FOR COMMERCIAL DRIVEWAYS USED AS A DELIVERY ACCESS AS WELL. A DRIVEWAY PAVEMENT DESIGN WITH 6" CONCRETE PAVEMENT AND 4" AGGREGATE DEPTH MAY BE LIMITED TO LIGHT COMMERCIAL VEHICULAR TRAFFIC.

■ APPROVED BY FHWA (ALL OTHERS APPROVED BY TDOT)

STATE OF TENNESSEE STANDARD DRAWING DEPARTMENT OF TRANSPORTATION

> DETAILS OF STANDARD CONCRETE **DRIVEWAYS**

RP-D-15

7/16/2021 7:49:55 AM P:\StandDraw\DESIGN NOT TO SCALE

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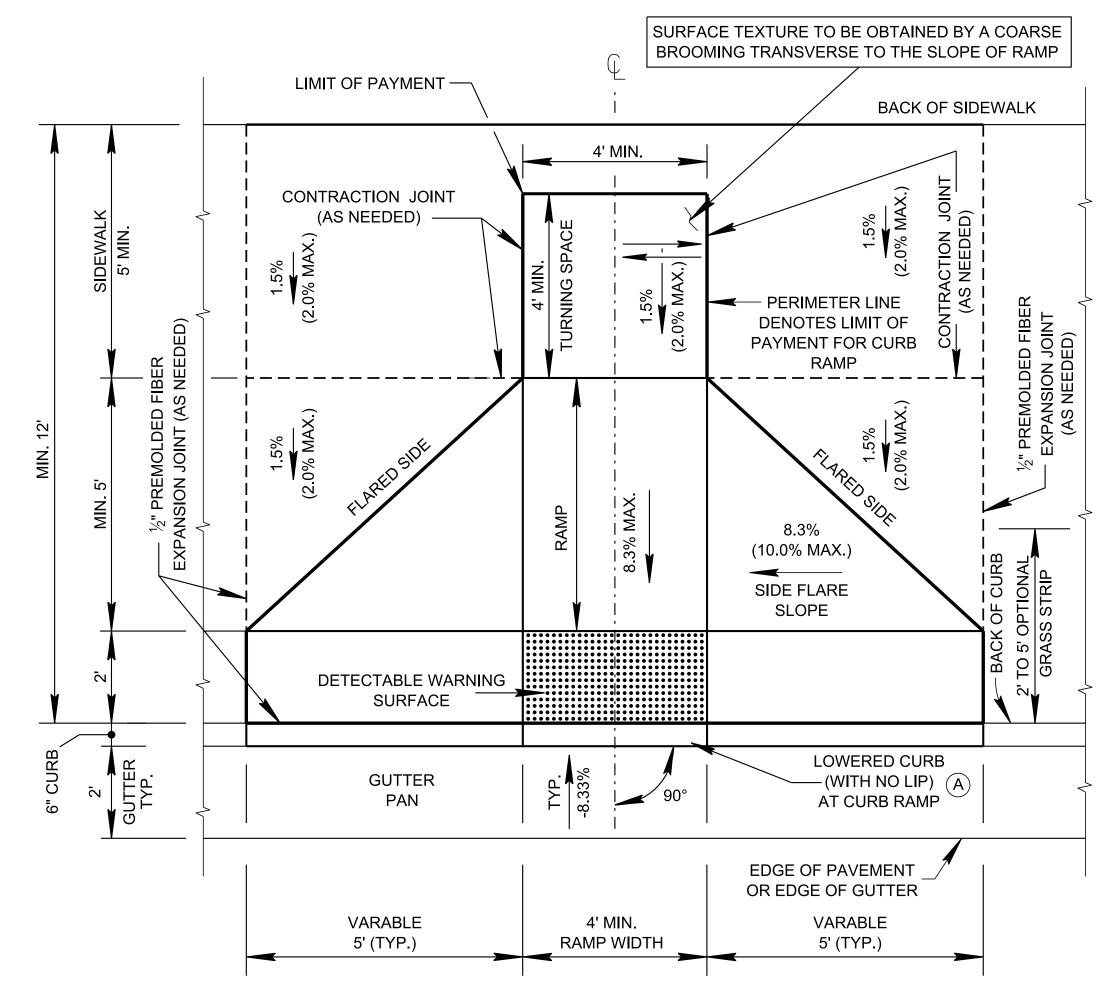
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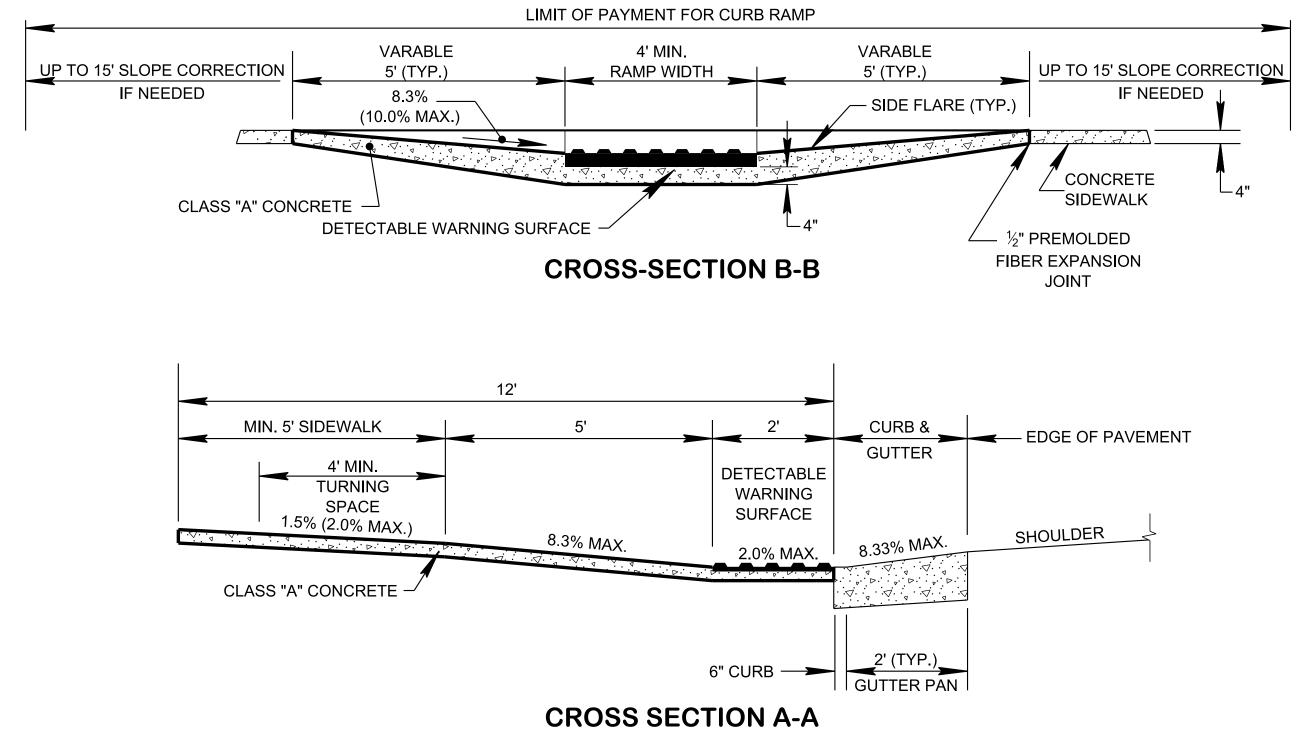
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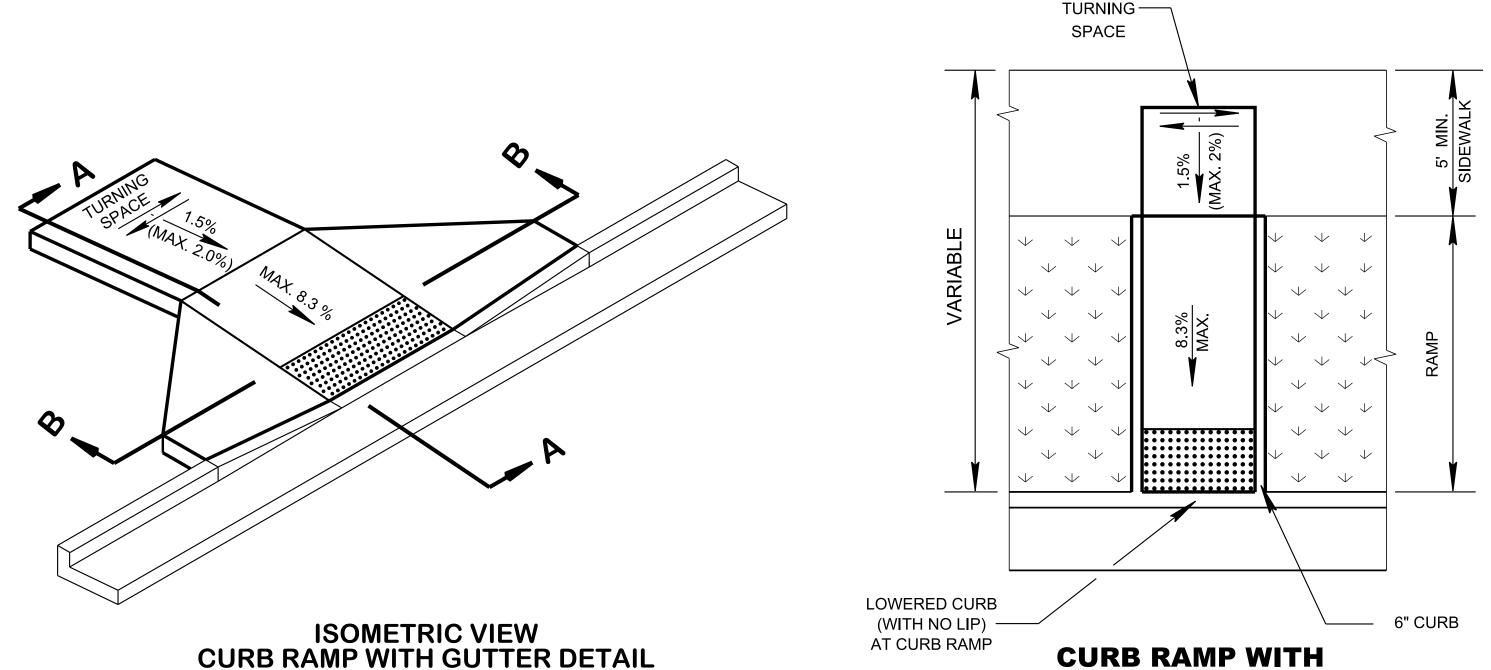
NOT-TO-SCALE-



### PERPENDICULAR CURB RAMP **PLAN VIEW**



(SHOWN 30" CURB AND GUTTER TRANSITION) AT LOCATIONS WHERE THE GUTTER PAN DOES NOT EXIST AND 2 FEET OF FLAT SURFACE MAY BE ELIMINATED. THE ALGEBRAIC DIFFERENCE IN GRADE AT THE CURB RAMP/STREET INTERFACE SHALL NOT EXCEED 11%.



#### **GENERAL NOTES**

4'-0" MIN

**RETURNED CURB** 

- PERPENDICULAR CURB RAMPS TO BE USED WHEN TOTAL SIDEWALK OR SIDEWALK AND GRASS STRIP WIDTH IS 12' OR GREATER, SEE STD. DWG. MM-CR-5 FOR PERPENDICULAR CURB RAMP IN CURVE, AND SEE STD. DWG. MM-CR-6 FOR PERPENDICULAR CURB RAMP PLACED OUTSIDE CURVE. PERPENDICULAR CURB RAMP MINIMUM DIMENSION SHOWN FOR 6" VERTICAL CURB
- CURB SHALL BE FLUSH ACROSS ENTIRE WIDTH OF CURB RAMP. DETECTABLE WARNING SURFACES SHALL EXTEND 2' IN THE DIRECTION OF PEDESTRIAN TRAVEL. AT CURB RAMPS AND BLENDED TRANSITIONS, DETECTABLE WARNING SURFACES SHALL EXTEND THE FULL WIDTH OF THE RAMP RUN (EXCLUDING ANY FLARED SIDES), BLENDED TRANSITION, OR TURNING SPACE. SEE STD. DWG. MM-CR-1 FOR DETECTABLE WARNING SURFACE DETAILS
- DESIGN / CONSTRUCTION MODIFICATIONS MAY BE REQUIRED FOR CURB RAMPS TO BE INSTALLED ALONG A ROADWAY WITH LONGITUDINAL GRADES EXCEEDING 5%. ENGINEER SHOULD BE NOTIFIED FOR ASSESSMENT IF THE CURB RAMP SIDE FLARES EXCEED 10' IN LENGTH DUE TO THE LONGITUDINAL GRADE
- PAYMENT:

#### NEW:

ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN NEWLY CONSTRUCTED SIDEWALK AREAS, SHALL BE PAID BY ITEM NO. 701-02.03. CONCRETE CURB RAMP. PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR CONSTRUCTION OF THE CURB RAMP(S). INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

#### RETROFIT:

ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN EXISTING SIDEWALK AREAS, REMOVAL OF THE EXISTING SIDEWALK, AND ADJUSTMENT OF GUTTER PAN SLOPE, SHALL BE PAID BY ITEM NO. 701-02.01, CONCRETE CURB RAMP (RETROFIT), PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR INSTALLATION OF CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

COST OF CURB AND GUTTER TO BE INCLUDED IN THE PRICE OF ITEM NO. 702-01, CONCRETE CURB, PER C. Y. OR ITEM NO. 702-03, CONCRETE COMBINED CURB & GUTTER, PER C. Y.

- WHERE NEW CURB RAMP CONDITIONS DO NOT MEET EXISTING SIDEWALK, THE DESIGNER SHALL ADD ADDITIONAL QUANTITY FOR 15 FEET OF SIDEWALK MODIFICATION TO TIE TO THE EXISTING GRADE.
- SIGNALIZED INTERSECTIONS WITH SIDEWALK SHALL HAVE PEDESTRIAN SIGNAL HEADS AND PUSHBUTTONS. ALL ACCESSIBLE PEDESTRIAN SIGNAL (APS) PUSHBUTTONS SHALL BE ALIGNED WITH THE DIRECTION OF THE RAMP. SEE TOOT TRAFFIC DESIGN MANUAL FOR DETAILS.
- FOR ADDITIONAL SIDEWALK DETAILS AND IF MAILBOXES ARE REMOVED DURING INSTALLATION OF THE CURB RAMP, PROVIDE A 12" X 12" OPENING BEHIND THE CURB. SEE STD. DWG. MM-SW-1.
- IF GRASS STRIP IS INSTALLED. THE SIDE FLARES MAY BE OMITTED AND A RETURNED CURB OPTION MAY BE USED.
- DESIRABLE SIDEWALK CROSS SLOPE IS 1.5 %, ABSOLUTE MAXIMUM IS 2.0 %.
- SURFACE TEXTURE TO BE OBTAINED BY A COARSE BROOMING TRANSVERSE TO THE SLOPE OF CURB RAMP.
- SEE STD. DWG. T-M-4 FOR CROSSWALK MARKING DETAILS.

(Replaced Std Dwg RP-H-4)



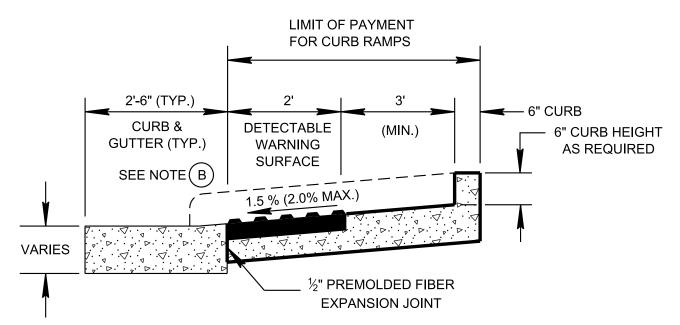
PERPENDICULAR **CURB RAMP** 

01-07-2019

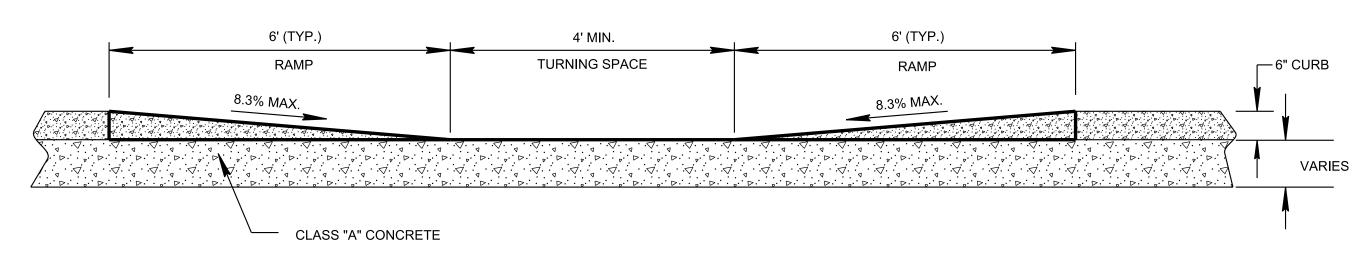
MM-CR-2

NOT TO SCALE

DIMENSIONS SHOWN ABOVE FOR 0% LONGITUDINAL ROADWAY GRADE

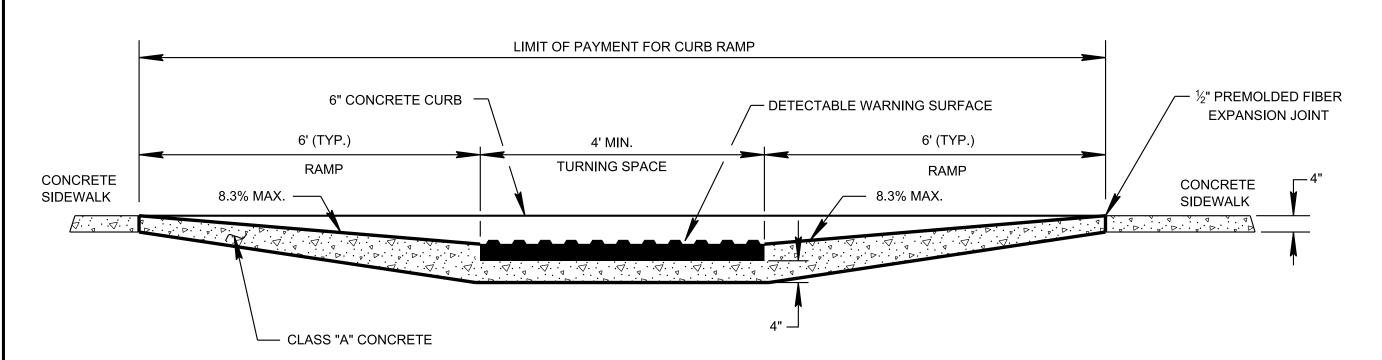


**SECTION A-A** 



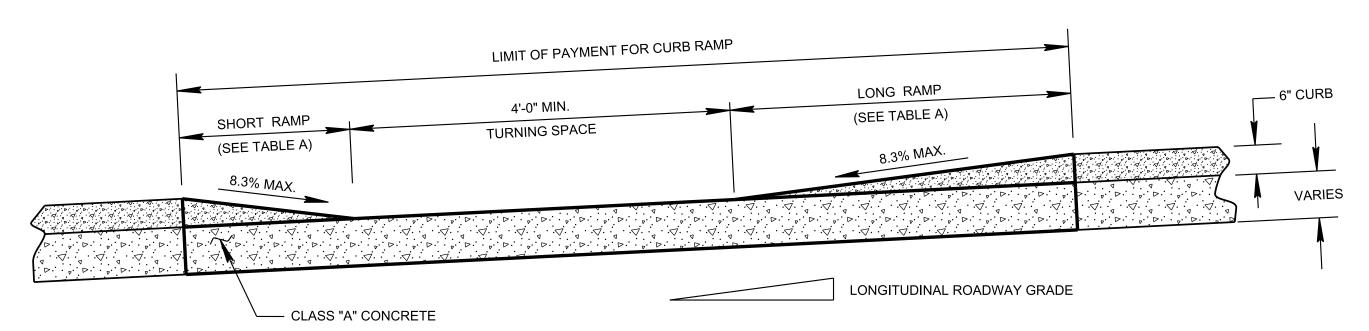
#### **SECTION B-B**

DIMENSIONS SHOWN ABOVE FOR 0% LONGITUDINAL ROADWAY GRADE



SECTION C-C

DIMENSIONS SHOWN ABOVE FOR 0% LONGITUDINAL ROADWAY GRADE



#### **ALTERNATE SECTION B-B**

#### PARALLEL CURB RAMP DETAIL SHOWN WITH LONGITUDINAL ROADWAY GRADE

MODIFICATIONS MAY BE REQUIRED FOR LONGITUDINAL ROADWAY GRADES STEEPER THAN 5%. ENGINEER SHOULD BE NOTIFIED FOR ASSESSMENT IF THE CURB RAMP RUN EXCEEDS 15' IN LENGTH DUE TO THE LONGITUDINAL ROADWAY GRADE.

#### **TABLE A**

LONGITUDINAL ROADWAY GRADE	LONG RAMP	SHORT RAMP	PAY AREA S.F.
5 %	15'-0"	3'-9"	114
4 %	11'-6"	4'-1"	98
3 %	9'-5"	4'-5"	90
2 %	7'-11"	4'-10"	84
1 %	6'-10"	5'-5"	92
0 %	6'-0"	6'-0"	80

BASED ON 5' SIDEWALK WIDTH (EXCLUDING BACK CURB)

#### **GENERAL NOTES**

- A PARALLEL CURB RAMPS MAY BE USE WHEN SIDEWALK WIDTH IS LESS THAN 12' AND CURB RAMP IS LOCATED ALONG TANGENT SIDEWALK SECTION OF ROADWAY. FOR PARALLEL CURB RAMPS INSTALLED IN CURVE SEE STD. DWG. MM-CR-7.
- B CURB SHALL BE FLUSH ACROSS ENTIRE WIDTH OF CURB RAMP. DETECTABLE WARNING SURFACES SHALL EXTEND 2' IN THE DIRECTION OF PEDESTRIAN TRAVEL. AT CURB RAMPS AND BLENDED TRANSITIONS, DETECTABLE WARNING SURFACES SHALL EXTEND THE FULL WIDTH OF THE RAMP RUN (EXCLUDING ANY FLARED SIDES), BLENDED TRANSITION, OR TURNING SPACE. SEE STD. DWG. MM-CR-1 FOR DETECTABLE WARNING SURFACE DETAILS.
- DESIGN / CONSTRUCTION MODIFICATIONS MAY BE REQUIRED FOR CURB RAMPS TO BE INSTALLED ALONG A ROADWAY WITH LONGITUDINAL GRADES EXCEEDING 5%. ENGINEER SHOULD BE NOTIFIED FOR ASSESSMENT IF THE CURB RAMP SIDE FLARES EXCEED 15' IN LENGTH DUE TO THE LONGITUDINAL GRADE.
- (D) PAYMENT:

#### NEW:

ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN NEWLY CONSTRUCTED SIDEWALK AREAS, SHALL BE PAID BY ITEM NO. 701-02.03, CONCRETE CURB RAMP, PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR CONSTRUCTION OF THE CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

#### RETROFIT:

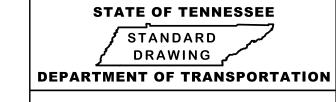
ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN EXISTING SIDEWALK AREAS, REMOVAL OF THE EXISTING SIDEWALK, AND ADJUSTMENT OF GUTTER PAN SLOPE, SHALL BE PAID BY ITEM NO. 701-02.01, CONCRETE CURB RAMP (RETROFIT), PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR INSTALLATION OF CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

COST OF CURB AND GUTTER TO BE INCLUDED IN THE PRICE OF ITEM NO. 702-01, CONCRETE CURB, PER C. Y. OR ITEM NO. 702-03, CONCRETE COMBINED CURB & GUTTER, PER C. Y.

- E) FOR SIGNALIZED INTERSECTIONS THAT REQUIRE PEDESTRIAN SIGNAL PUSHBUTTONS, SEE TDOT TRAFFIC DESIGN MANUAL FOR PLACEMENT DETAILS.
- (F) FOR ADDITIONAL SIDEWALK DETAILS AND IF MAILBOXES ARE REMOVED DURING INSTALLATION OF THE CURB RAMP, PROVIDE A 12" X 12" OPENING BEHIND THE CURB. SEE STD. DWG. MM-SW-1.
- WHERE NEW CURB RAMP CONDITIONS DO NOT MEET EXISTING SIDEWALK, THE DESIGNER SHALL ADD ADDITIONAL QUANTITY FOR UP TO 15 FEET IN EACH DIRECTION OF SIDEWALK MODIFICATION TO TIE TO THE EXISTING GRADE.
- H) SURFACE TEXTURE TO BE OBTAINED BY A COARSE BROOMING TRANSVERSE TO THE SLOPE OF CURB RAMP.
- (I) SEE STD. DWG. T-M-4 FOR CROSSWALK MARKING DETAILS.

(Replaced Std Dwg RP-H-5)

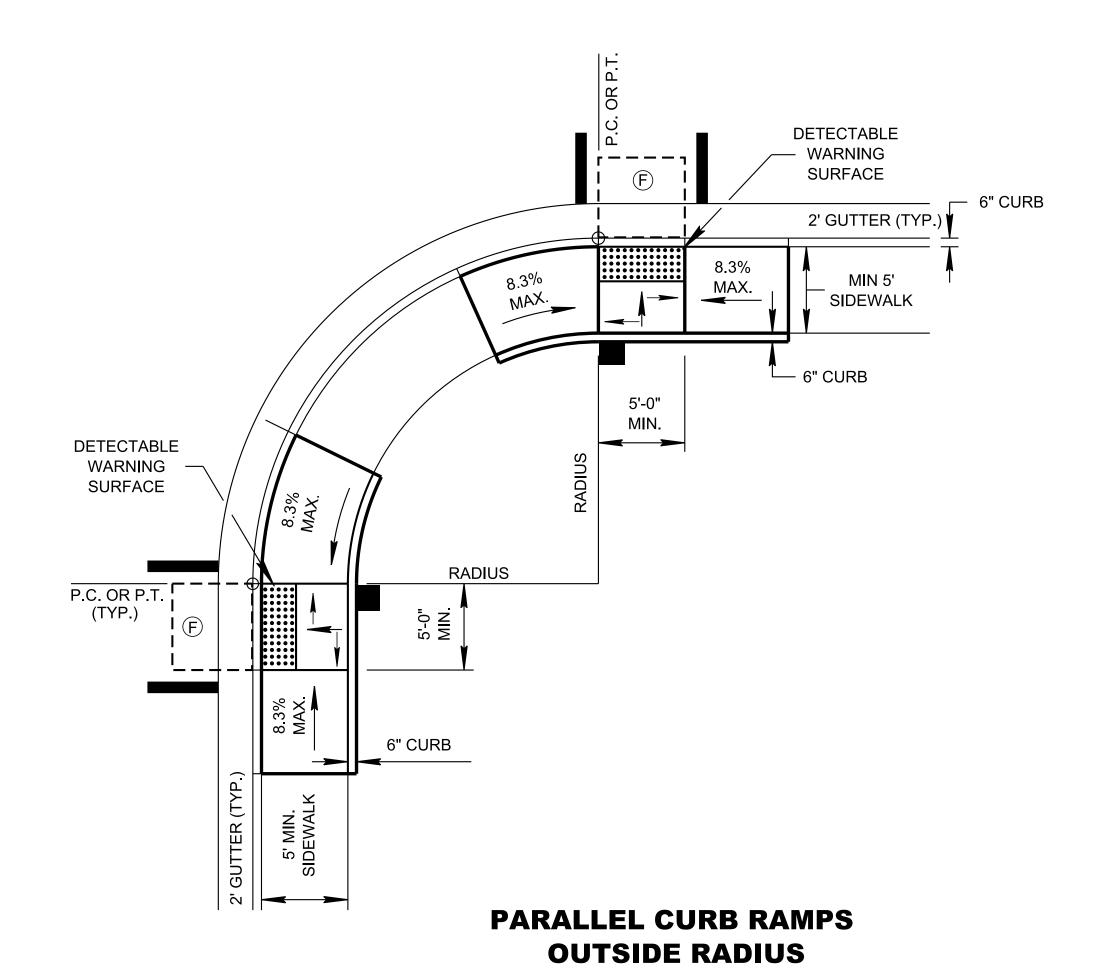


PARALLEL CURB RAMP

01-07-2019

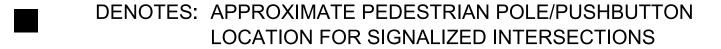
MM-CR-3

# PERPENDICULAR CURB RAMP OUTSIDE RADIUS (WITH GRASS STRIP OR WIDE SIDEWALK)



#### **LEGEND**

© DIMENSION VARIES RELATIVE TO LONGITUDINAL ROADWAY GRADE, 8.3% DESIRABLE (10.0% MAX.)



1.5% (2.0% MAX.)

#### **GENERAL NOTES**

- A FOR DETECTABLE WARNING SURFACE DETAILS SEE STD. DWG. MM-CR-1. FOR ADDITIONAL DETAILS AND OTHER INFORMATION FOR PERPENDICULAR CURB RAMPS NOT SHOWN ON THIS DRAWING SEE STD. DWG. MM-CR-2 AND FOR PARALLEL CURB RAMPS SEE STD. DWG. MM-CR-3. FOR CROSSWALK MARKING DETAILS SEE STD. DWG. T-M-4.
- B IF PERPENDICULAR CURB RAMPS AND TURNING SPACE CANNOT BE CONSTRUCTED DUE TO LIMITED RIGHT-OF-WAY, USE PARALLEL CURB RAMP INSTEAD.
- CARE SHALL BE TAKEN ON ALL ROADWAY CURB RAMPS AT INTERSECTIONS WITH SIDEWALK AND CURB RAMPS TO ENSURE A UNIFORM GRADE AROUND THEM. THE ROADWAY CURB RAMP GRADE SHALL BE FREE OF SAGS AND SHORT GRADE CHANGES.
- D SIDEWALK WIDTH SHALL NOT INCLUDE 6" CONCRETE CURB. THE DESIRABLE SIDEWALK CROSS SLOPE IS 1.5 %, ABSOLUTE MAXIMUM IS 2.0%.
- DRAINAGE STRUCTURES SHALL NOT BE PLACED IN THE CROSSWALK OR IN FRONT OF THE CURB RAMP.
- F) TURNING SPACE \ CLEAR SPACE:

CLEAR SPACE BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE 4' (MIN.) BY 4' (MIN.) SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.

TURNING SPACE MUST BE PROVIDED AT THE TOP OF PERPENDICULAR CURB RAMPS. THE TURNING SPACE MUST BE 4' (MIN.) BY 4' (MIN.), AND IS PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF THE SIDEWALK, THE TURNING SPACE MUST BE 4' (MIN.) BY 5' (MIN.), WITH THE 5' DIMENSION PROVIDED IN THE DIRECTION OF THE RAMP RUN.

FOR PARALLEL CURB RAMPS, A TURNING SPACE 4' (MIN.) BY 4' (MIN.) SHALL BE PROVIDED AT THE BOTTOM OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. IF THE TURNING SPACE IS CONSTRAINED ON 2 OR MORE SIDES, THE TURNING SPACE SHALL 4' (MIN.) BY 5' (MIN.). THE 5' DIMENSION SHALL BE PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.

(G) GRADE BREAKS:

GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMP RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE CURB RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF CURB RAMP RUNS AND TURNING SPACES. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.

WHERE THE END OF BOTTOM GRADE BREAK ARE BEHIND THE BACK OF CURB AND THE DISTANCE FROM EITHER END OF THE BOTTOM GRADE BREAK TO THE BACK OF CURB IS 5' OR LESS, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE CURB RAMP RUN WITHIN ONE DOME SPACING OF THE BOTTOM GRADE BREAK.

H PEDESTRIAN SIGNAL PUSHBUTTON:

WHERE PEDESTRIAN SIGNALS ARE PROVIDED AT PEDESTRIAN STREET CROSSINGS, THEY SHALL INCLUDE ACCESSIBLE PEDESTRIAN SIGNALS AND POLE\PEDESTRIAN PUSHBUTTONS COMPLYING WITH SECTIONS 4E.08 THROUGH 4E.13 OF THE MUTCD. FOR DETAILS OF THE PLACING OF PEDESTRIAN SIGNAL PUSHBUTTONS SEE TDOT TRAFFIC DESIGN MANUAL.

WHEN TWO PEDESTRIAN PUSHBUTTONS ARE ON ONE CORNER THEY WILL BE SEPARATED BY 10 FEET.

PAYMENT:

COST OF CURB AND GUTTER TO BE INCLUDED IN THE PRICE OF ITEM NO. 702-01, CONCRETE CURB, PER C. Y. OR ITEM NO. 702-03, CONCRETE COMBINED CURB & GUTTER, PER C. Y.

NEW CURB RAMPS:

ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN NEWLY CONSTRUCTED SIDEWALK AREAS, SHALL BE PAID BY ITEM NO. 701-02.03, CONCRETE CURB RAMP, PER SQUARE FOOT.

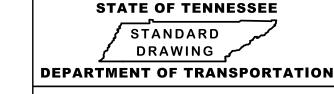
PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR CONSTRUCTION OF THE CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

CURB RAMPS (RETROFIT):

ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN EXISTING SIDEWALK AREAS, REMOVAL OF THE EXISTING SIDEWALK, AND ADJUSTMENT OF GUTTER PAN SLOPE, SHALL BE PAID BY ITEM NO. 701-02.01, CONCRETE CURB RAMP (RETROFIT), PER SQUARE FOOT.

PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR INSTALLATION OF CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

(Replaced Std Dwg RP-H-8)

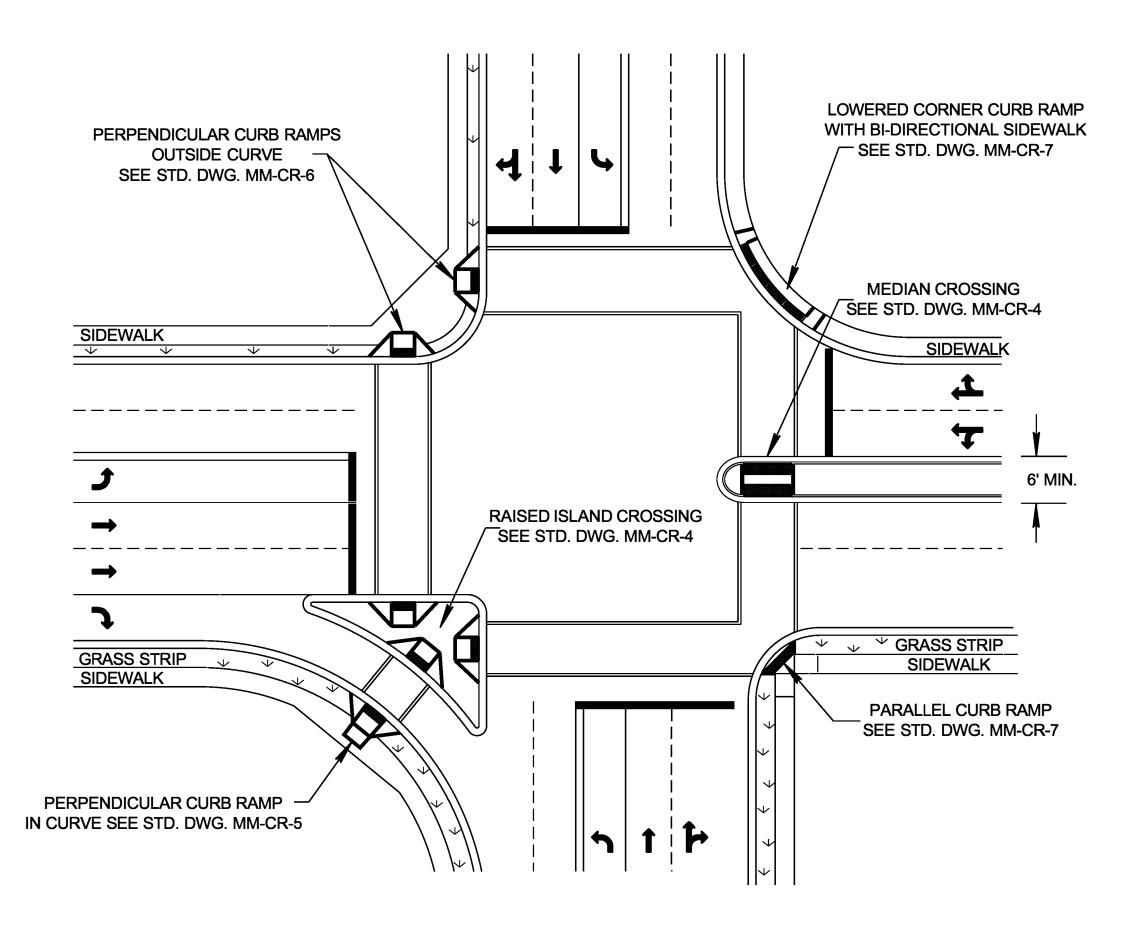


DUAL CROSSING
CURB RAMP
PLACED
OUTSIDE CURVE

MM-CR-6

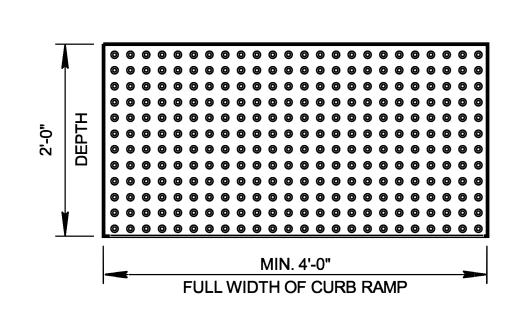
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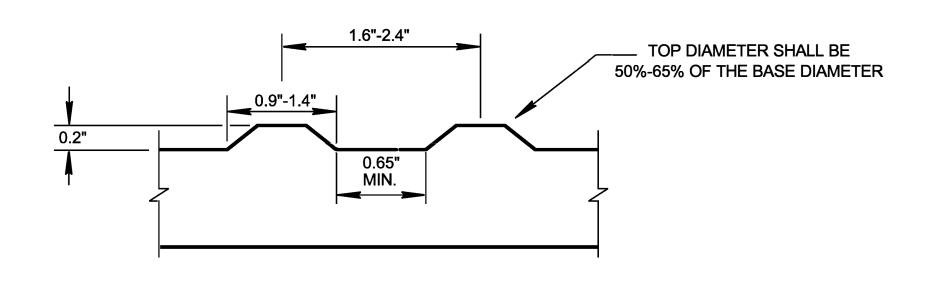
REV. 10-15-25 REVISED GENERAL NOTES BY ALTERING L FOR HAMILTON COUNTY TN REQUIREMENTS.



#### **PLAN VIEW**

(EXAMPLE LAYOUT SHOWING EACH RAMP TYPE: SEE REFERENCED STANDARD DRAWINGS FOR SPECIFIC ALIGNMENT INFORMATION)





**DETECTABLE WARNING SURFACE DETAIL** 

**DETECTABLE WARNING SURFACE ELEVATION VIEW (TYP.)** 

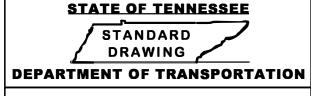
#### **GENERAL NOTES**

- DETAILS SHOWN ON THIS STANDARD DRAWING APPLY TO THE CONSTRUCTION OR RECONSTRUCTION OF STREETS, CURBS, OR SIDEWALKS.
- NEW CURB RAMPS INSTALLATION SHALL HAVE COMPOSITE DETECTABLE WARNING SURFACE. ONLY PRODUCTS LISTED ON THE DEPARTMENT'S QPL SHALL BE USED.
- THE DETECTABLE WARNING SURFACES SHALL BE YELLOW. THE COLOR YELLOW IS USED BECAUSE YELLOW IS THE LAST COLOR A VISUALLY IMPAIRED PERSON CAN DETECT PRIOR TO TOTAL LOSS OF VISION. DETECTABLE WARNING SURFACES SHALL BE CONSTRUCTED USING PRODUCTS APPROVED ON THE TDOT QPL NO. 37.
- THE DEPTH OF DETECTABLE WARNING SURFACES SHALL BE 2 FEET IN THE DIRECTION OF PEDESTRIAN TRAVEL. AT CURB RAMPS AND BLENDED TRANSITIONS, DETECTABLE WARNING SURFACES SHALL EXTEND THE FULL WIDTH OF THE RAMP RUN (EXCLUDING ANY FLARED SIDES), BLENDED TRANSITION, OR TURNING SPACE.
- THE DETECTABLE WARNING SURFACE SHALL NOT BE EXTENDED BEYOND CROSSWALK BOUNDARIES AT LOCATIONS LACKING PROPER CURB HEIGHT.
- CURB RAMPS ARE TO BE LOCATED AS SHOWN ON THE PLANS.
- CURB RAMPS SHALL BE PROVIDED AT ALL CORNERS OF STREET INTERSECTIONS WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB. CURB RAMPS SHALL ALSO BE PROVIDED AT MIDBLOCK CROSSWALK LOCATIONS AND ACROSS FROM CORNER RAMPS AT T-INTERSECTIONS.
- CARE SHALL BE TAKEN TO ENSURE A UNIFORM GRADE ON THE RAMP. THE GRADE SHALL BE FREE OF SAGS AND SHORT GRADE CHANGES.
- DRAINAGE STRUCTURES SHALL NOT BE PLACED IN LINE WITH RAMPS. INSTALL CATCH BASINS ON UPSTREAM SIDE OF RAMP FOR ROADS WITH GRADES LESS THAN 2%.
- CROSSWALK MARKINGS, IF USED, SHALL BE LOCATED AS SHOWN ON THE APPLICABLE CURB RAMP STANDARD DRAWING. FOR CROSSWALK MARKING DETAILS, SEE STD. DWG. T-M-4.
- FOR PERPENDICULAR CURB RAMP DESIGN DETAILS, SEE STD. DWG. MM-CR-2. FOR PARALLEL CURB RAMP DESIGN DETAILS, SEE STD. DWG. MM-CR-3.
- RAMPS SHALL NOT BE PLACED WITHIN THE RADIUS OF A CURVE. RAMPS SHALL BE PLACED OUTSIDE THE CURVE RADIUS TO PROVIDE A DIRECT PATH ACROSS.
- FOR SIGNALIZED INTERSECTIONS THAT REQUIRE PEDESTRIAN SIGNAL PUSHBUTTONS, SEE TDOT TRAFFIC DESIGN MANUAL FOR PLACEMENT DETAILS.

#### PROJECTS ON EXISTING ROADWAYS

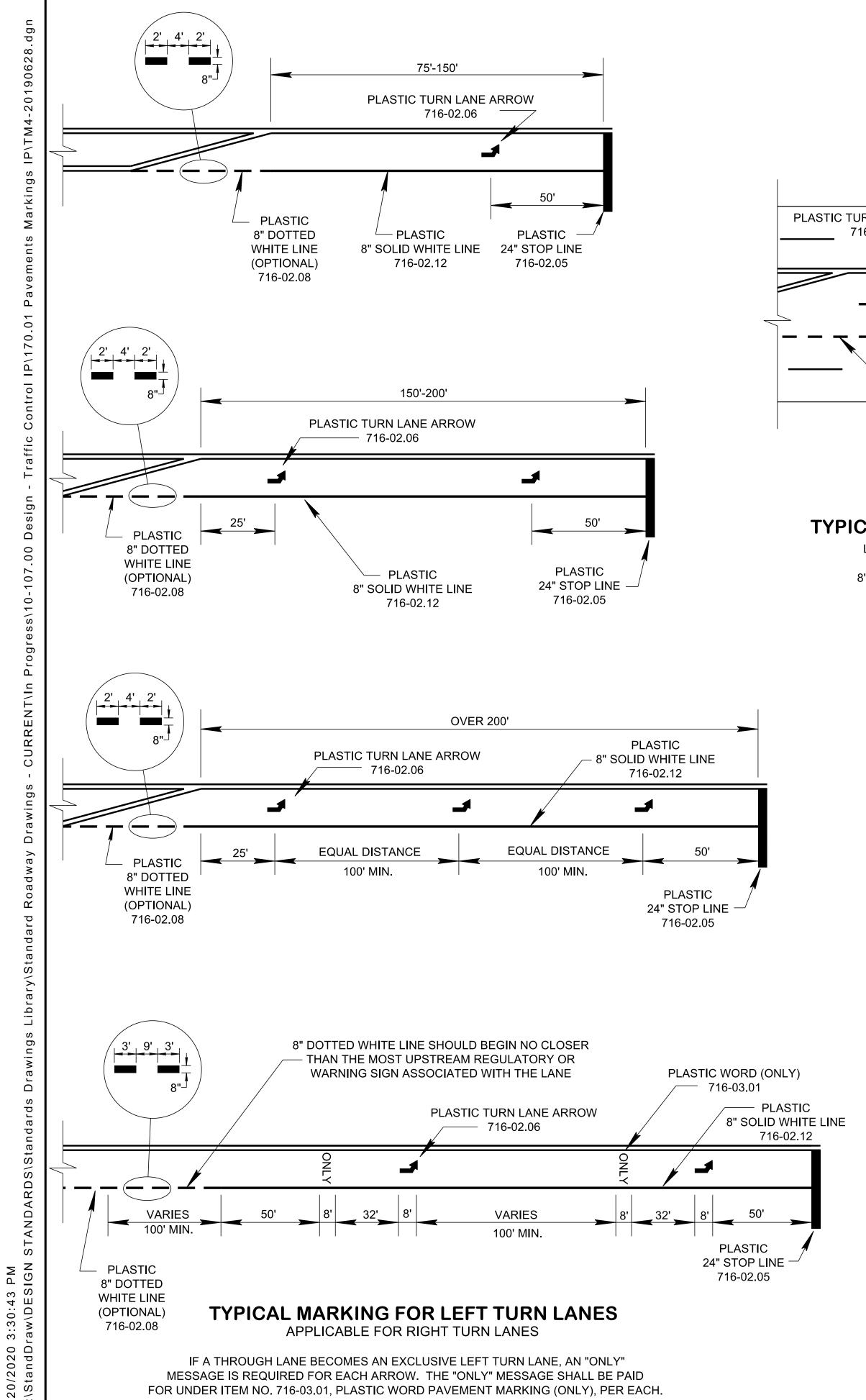
- LOCATIONS WHERE THE EXISTING CURB RAMP IS COMPLIANT WITH TDOT STANDARDS BUT THE DETECTABLE WARNING SURFACE IS NOT, ITEM NO. 701-02.06, DETECTABLE WARNING SURFACE (REHABILITATION), S.F., SHALL BE USED FOR THE INSTALLATION OF THE DETECTABLE WARNING SURFACE.
- ONLY PRODUCTS FROM TDOT QPL SHALL BE USED (MAX. 1/4" THICK) AND INSTALLED USING APPROPRIATE MECHANICAL ATTACHMENT (MIN. 4 EACH) IN ADDITION TO BOUNDING CHEMICAL AS INSTRUCTED BY THE MANUFACTURE INSTALLATION MANUAL.

(Replaced Std Dwg RP-H-3)



DETECTABLE WARNING SURFACE PLACEMENT ON CURB RAMPS

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IF A THROUGH LANE BECOMES AN EXCLUSIVE LEFT TURN LANE. AN "ONLY"

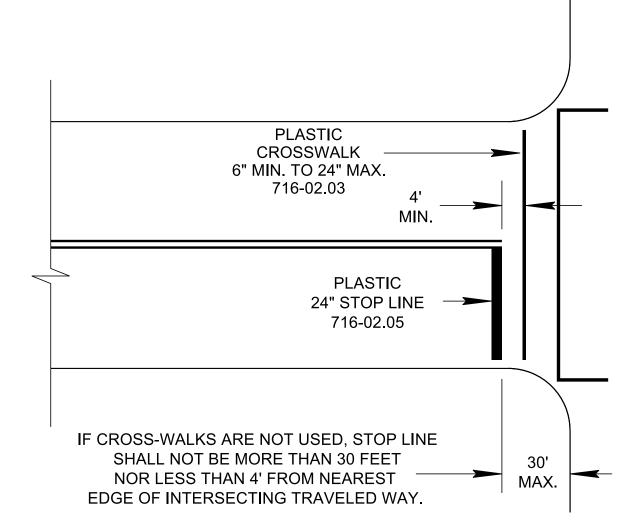
MESSAGE IS REQUIRED FOR EACH ARROW. THE "ONLY" MESSAGE SHALL BE PAID

FOR UNDER ITEM NO. 716-03.01, PLASTIC WORD PAVEMENT MARKING (ONLY), PER EACH.

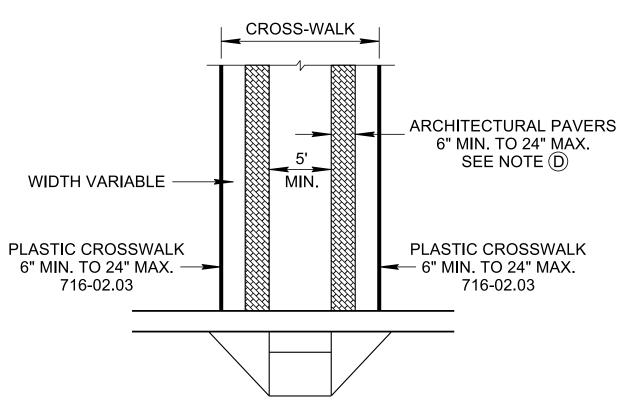
PLASTIC 24" STOP LINE ITEM NO. 716-02.05 2' , 4' , 2' PLASTIC TURN LANE ARROW 716-02.06 -PLASTIC 8" DOTTED YELLOW LINE (OPTIONAL) 716-02.08 \_ PLASTIC 8" DOTTED WHITE LINE (OPTIONAL) 716-02.08 **PLASTIC** PLASTIC 8" DOTTED 8" SOLID WHITE LINE WHITE LINE 716-02.12 (OPTIONAL) 716-02.08

#### TYPICAL MARKING FOR DOUBLE LEFT TURN LANES

LEFT TURN ARROWS SHALL BE PAID FOR UNDER ITEM NO. 716-02.06, PLASTIC PAVEMENT MARKING (TURN LANE ARROW), PER EACH. 8" DOTTED WHITE LINE SHALL BE PAID FOR UNDER ITEM NO. 716-02.08, PLASTIC PAVEMENT MARKING (8" DOTTED LINE), PER LINEAR FOOT.

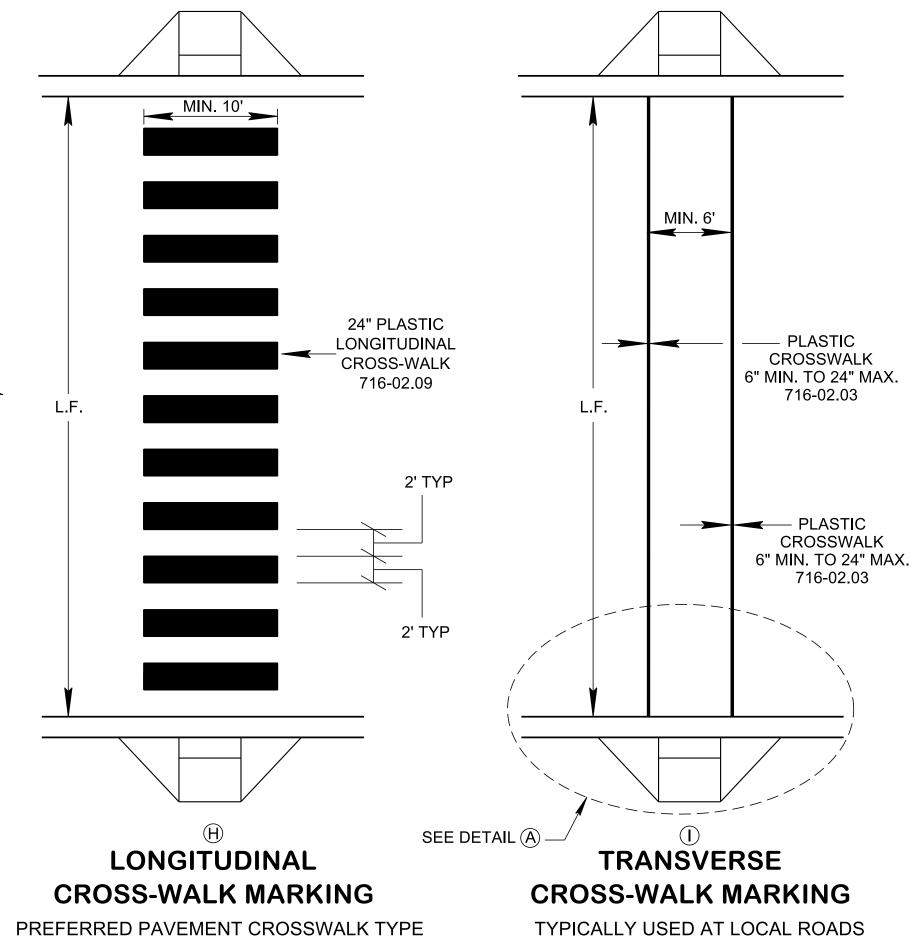


#### TYPICAL MARKING FOR STOP LANE



DETAIL A

SMOOTH SURFACE (I.E. CONCRETE SURFACE)



#### **GENERAL NOTES**

AND STREETS WHERE ADT<2000

(A) 6" PAVEMENT MARKING WILL BE USED FOR ALL CENTER LINE, LANE LINES AND EDGE LINES ON ALL ROADS EXCEPT WHERE AS SHOWN ON STANDARD DRAWINGS.

#### **CROSS-WALK**

SHALL BE USED WHERE V>40 MPH

- SPECIAL PAVERS AND PAVEMENT TEXTURES ARE NOT ACCEPTABLE CROSS-WALK MARKINGS THEREFORE, SPECIAL PAVERS AND PAVEMENT TEXTURES SHALL ONLY BE USED IN CONJUNCTION WITH TRANSVERSE CROSS-WALK MARKINGS. SPECIAL PAVERS ARE TO BE DESIGNED TO MEET PAVEMENT DESIGN SCHEDULE AND DESIGN LOADING, ON STATE ROUTES, DETAILS SHALL BE REVIEWED AND APPROVED BY THE DEPARTMENT.
- (C) IF SPECIAL PAVERS, PAVEMENT TEXTURES, OR ANY OTHER ARCHITECTURAL PAVEMENT MATERIALS ARE USED, THE ARCHITECTURAL PAVEMENT MATERIALS SHALL PROVIDE A SMOOTH, WITHOUT JOINT WALKABLE/RIDEABLE, STABLE, FIRM AND SLIP-RESISTANT SURFACE PER ADA STANDARDS.
- ARCHITECTURAL PAVERS SHALL BE PAID FOR UNDER ITEM NO. 701-01.08, CONCRETE PAVERS (CROSS-WALK) PER. SF.

#### STOP LINE PLACEMENT

- (E) LOCATION SHALL BE DETERMINED BY VEHICLE TURNING PATHS FROM INTERSECTION ROADWAY, AND IF SIGNALIZED, ITS POSITION RELATIVE TO SIGNAL HEADS. PER MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- (F) STOP LINES SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBER: 716-02.05, PLASTIC PAVEMENT MARKING (STOP LINE), PER LF.
- (G) STOP LINES REQUIRED ONLY ON APPROACHES CONTROLLED BY STOP SIGNS OR TRAFFIC SIGNALS.

#### **PAYMENT**

- (H) PAVEMENT MARKINGS SHALL BE PAID FOR UNDER ITEM NO. 716-02.09, PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK) PER LF. ON LOCAL ROADS WITH ADT<1000, PAVEMENT MARKINGS COULD ALTERNATIVELY BE PAID FOR UNDER ITEM NO. 716-05.22, PAINTED PAVEMENT MARKING (LONGITUDINAL CROSS-WALK) PER LF. MEASUREMENT IS CALCULATED AS THE FULL WIDTH OF PAVEMENT.
- PAVEMENT MARKINGS SHALL BE PAID FOR UNDER ITEM NO. 716-02.03, PLASTIC PAVEMENT MARKING (CROSSWALK) PER LF. ON LOCAL ROADS WITH ADT<1000, PAVEMENT MARKINGS COULD ALTERNATIVELY BE PAID FOR UNDER ITEM NO. 716-05.03, PAINTED PAVEMENT MARKING (CROSS-WALK) PER LF. MEASUREMENT IS CALCULATED AS THE FULL WIDTH OF PAVEMENT.

REV. 2-22-88: REVISED DETAIL LEFT TURN LANE MARKING. ADDED NOTE FOR STOP LINE TO BE PARALLEL TO CROSS-WALK NOTED LONGITUDINAL CROSS-WALK LINE TO BE WHITE. CHANGED DWG. NO. FROM T-M-11 TO T-M-4. ADDED DETAIL FOR DOUBLE LEFT TURN LANE.

REV. 3-20-91: REDREW AND REORGANIZED SHEET. ADDED PAY ITEMS AND THEIR DESCRIPTIONS.

- REV. 5-27-01: CHANGED DESCRIPTION IN ITEM NO. 716-02.09.
- REV. 9-5-01: CHANGED DESCRIPTION IN

DETAIL SHOWN ON CROSS-WALK MARKING

- ITEM NO. 716-02.03. ■ REV.1-19-05: CHANGED HANDICAP RAMP
- DETAILS. ■ REV.3-15-07: REVISED TO REFER THE HANDICAP RAMP STANDARDS TO DETERMINE THE MINIMUM WIDTH OF
- REV.6-1-09: TYPICAL STOP LINE PLACEMENT NOTE REVISED.

CROSS-WALK MARKINGS.

- REV. 11-1-11: REVISED PAVEMENT
- MARKINGS FOR LEFT TURN DETAILS.
- REV. 7-24-14: REVISED CROSS-WALK TO SHOW LONGITUDINAL LINES AS PREFERRED OPTION. ADDED PAVEMENT MARKING TABLE.
- REV. 10-10-16: ADDED DETAIL FOR CROSS-WALK MARKING, UPDATED ITEM NUMBERS FOR CROSS-WALK MARKING, UPDATED NOTES FOR STOP LINE PLACEMENT AND CROSS-WALK MARKING
- REV. 08-02-18: MODIFIED NOTE (A). ADDED ALTERNATIVE PAY ITEMS FOR PAINTED CROSS-WALK MARKINGS. ADDED NOTE © TO THE CROSS-WALK NOTES. REDREW

REV. 06-28-19: REMOVED PAVEMENT MARKING TABLE. PUT CROSS-WALK NOTES AND STOP LINE PLACEMENT NOTES IN GENERAL NOTES. REDREW SHEET.

REV. 07-17-20: ADDED NOTE UNDER TRANSVERSE CROSS-WALK MARKING AND REVISED V FOR LONGITUDINAL CROSS-WALK MARKING TO >40 MPH.

> MINOR REVISION -- FHWA APPROVAL NOT REQUIRED

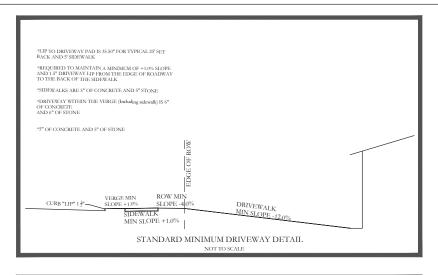
STATE OF TENNESSEE STANDARD DRAWING

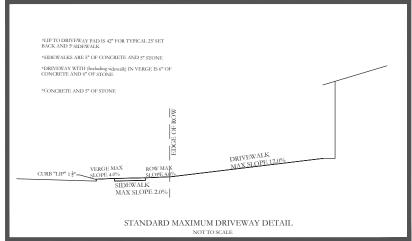
> STANDARD INTERSECTION **PAVEMENT MARKINGS**

DEPARTMENT OF TRANSPORTATION

T-M-4

NOT TO SCALE





			HAMILTON COUNTY		
			PRIVATE DRIVEWAY ENTRANCE		
O NO.	INITIAL ISSUE 0 REVISION	07/18/22 DATE	DATE OF ORIGINAL ISSUE JULY 18, 2022	STANDARD NUMBER: HCSD-200.03	