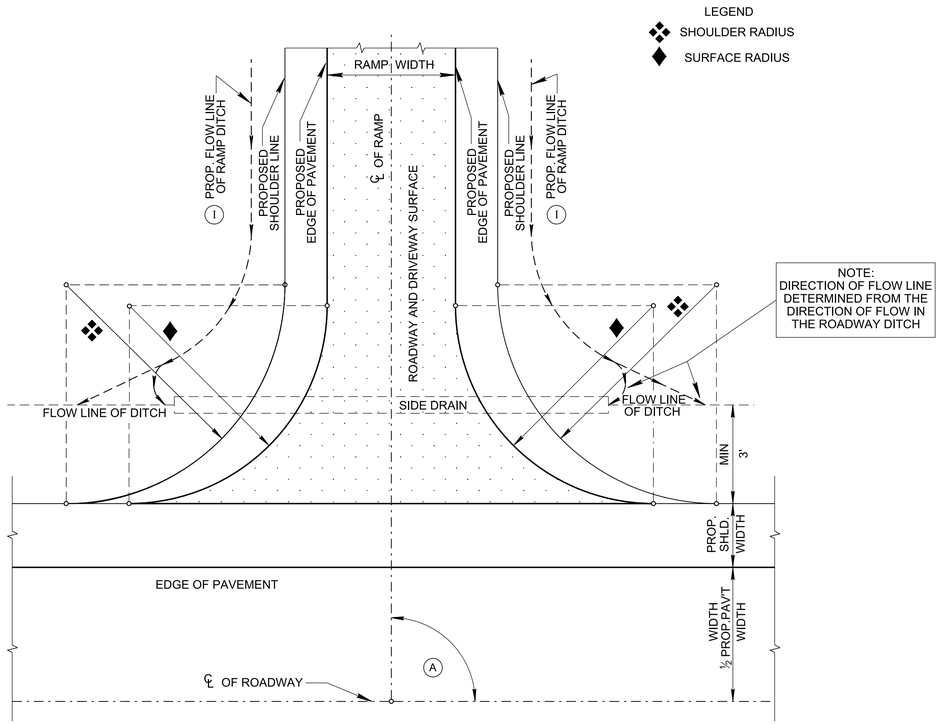
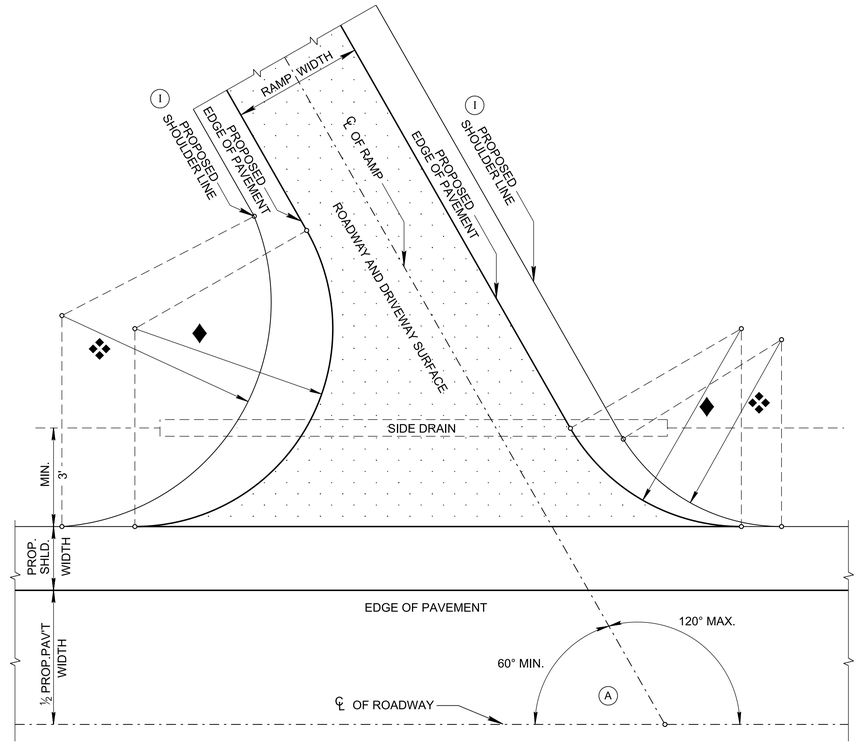
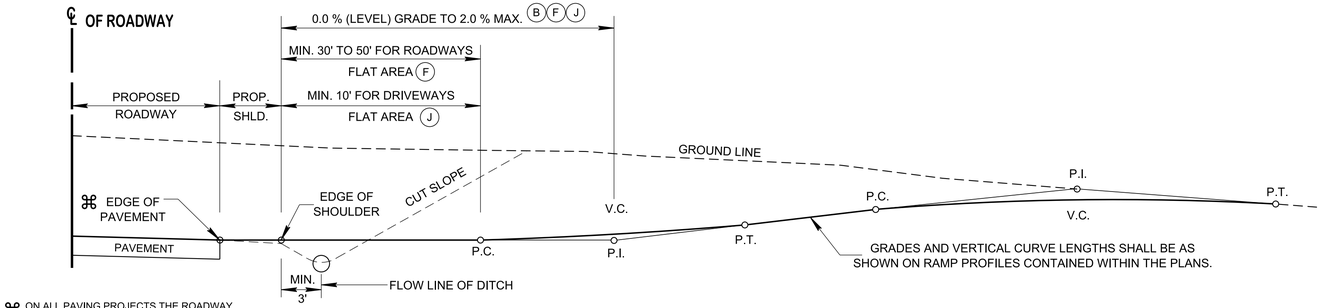


PLAN OF RAMP-90° WITH ℄ OF SURVEY



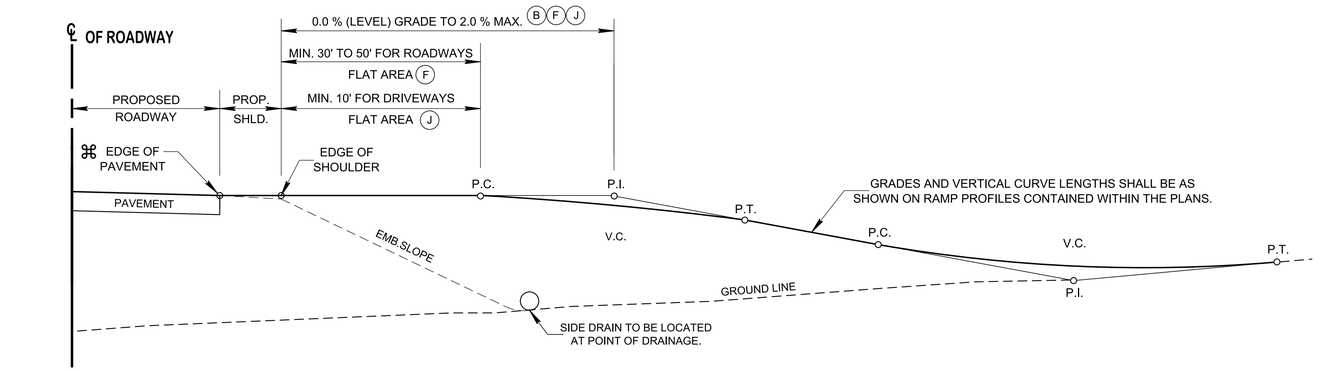
PLAN OF RAMP-SKEWED TO ℄ OF SURVEY

FLOW LINE ARE LEFT OUT FOR CLARITY



⌘ ON ALL PAVING PROJECTS THE ROADWAY AND DRIVEWAY SURFACE MATERIAL SHALL BE PLACED FLUSH WITH ADJACENT EDGE OF PAVEMENT.

℄ PROFILE OF RAMP IN EXCAVATION



℄ PROFILE OF RAMP IN EMBANKMENT

GENERAL NOTES

(A) ALIGNMENT OF INTERSECTING ROADWAYS AND PRIVATE DRIVES (RAMPS) SHALL BE MODIFIED SO AS TO ATTAIN ADEQUATE SIGHT DISTANCES AND DESIRABLE GRADES. DESIRABLE SKEW IS 90° AND MINIMUM IS 60°.

(B) SEE AASHTO CURRENT PUBLICATION "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS" AND TDOT "ROADWAY DESIGN GUIDELINES" FOR INTERSECTION & INTERCHANGE DESIGN REQUIREMENTS.

(C) WHERE EXISTING SHOULDER LINES AND EDGES OF EXISTING PAVEMENT ARE NOT THE SAME, PROPOSED SHOULDER LINES SHALL TIE INTO EXISTING SHOULDER LINES.

(D) PROFILE OF EMBANKMENT AND EXCAVATION RAMPS ARE THE SAME EXCEPT FOR LOCATION OF SIDE DRAIN AND DITCHES.

(E) ALL ROADWAYS AND PRIVATE DRIVES (RAMPS) THAT REQUIRE SIDE DRAINS SHALL USE STANDARD DRAWING NO. D-SEW-1A, UNLESS THE ENDWALL IS PROTECTED BY GUARDRAIL.

(F) ALL ROADWAYS AND RAMPS AT INTERSECTIONS AND INTERCHANGES SHALL HAVE A FLAT SPACE AT THE TIE IN POINT OF THE INTERSECTING ROADWAY OF 30' TO 50' IN LENGTH WITH A GRADE OF 0.00% DESIRABLE TO A 2.00% MAX. SEE ℄ PROFILE OF RAMP IN EXCAVATION AND EMBANKMENT DETAILS.

(G) ANY NECESSARY EXCAVATION FOR INSTALLING RAMPS OR ROADWAYS SHALL BE PAID FOR UNDER ITEM 203-01, ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED), C.Y.

(H) DRIVEWAY VERTICAL CURVE LENGTHS SHALL BE BASED ON K VALUES OF: CREST, K = 1 AND SAG, K = 2.

$$K = \frac{\text{L (LENGTH OF VERTICAL CURVE)}}{\text{A (ALGEBRAIC DIFFERENCE OF GRADE)}} \quad \text{OR} \quad K \times A = L \text{ (VERTICAL CURVE LENGTH)}$$

(I) SHOULDERS NOT REQUIRED FOR DRIVEWAYS.

(J) DUE TO SAFETY CONCERNS, IT IS DESIRABLE FOR ALL PRIVATE DRIVES AND BUSINESS ENTRANCES TO HAVE A FLAT SPACE AT THE TIE IN POINT OF THE INTERSECTING ROADWAY OF 10' MINIMUM IN LENGTH WITH A GRADE OF 0.00% DESIRABLE TO A 2.00% MAX. SEE ℄ PROFILE OF RAMP IN EXCAVATION AND EMBANKMENT DETAILS. FOR ADDITIONAL TDOT DRIVEWAY REQUIREMENTS SEE "MANUAL FOR CONSTRUCTING DRIVEWAY ENTRANCES ON STATE HIGHWAYS".

REV. 10-23-69: RETRACED DRAWING.

REV. 07-01-72: CHANGED DEPARTMENT NAME.

REV. 01-01-76: CHANGED DWG. NO. FROM D-R-2(68) TO RP-R-1.

REV. 03-15-76: DELETED REFERENCE TO OLD DWG. NO. AND SUBSTITUTED NEW DWG. NO.

REV. 06-06-80: REVISED GUIDE TABLE FOR RAMP DESIGN AND NUMBERED GENERAL NOTES.

☐ REV. 05-27-96: REDREW DRAWING. MADE MINOR REVISIONS AS NEEDED.

☐ REV. 05-27-01: CHANGED PAY ITEM 203-01 DESCRIPTION.

REV. 06-28-19: REMOVED GUIDE TABLE FOR RAMPS. REVISED ALL GENERAL NOTES. FOR ROADWAYS & DRIVEWAYS: ADDED REQUIREMENTS FOR A FLAT AREA AND PROPOSED APPROACH GRADES TO THE ℄ PROFILE OF RAMP IN EXCAVATION AND EMBANKMENT DETAILS. RENAMED AND REDREW SHEET.

REV. 10-16-20: THE START OF THE 10' OF 0% WAS MOVED FROM EDGE OF SHOULDER TO THE EDGE OF PAVEMENT ON PLANS AND PROFILES. REVISED GENERAL NOTE (J).

☐ APPROVED BY FHWA
(ALL OTHERS APPROVED BY TDOT)

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

STANDARD RAMP DETAILS FOR ROADWAYS AND DRIVEWAYS

RP-R-1

NOT TO SCALE

LLP

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P:\StandDraw\DESIGN STANDARDS\Standards Drawings Library\Standard Roadway Drawings - CURRENT\In Progress\10-104.00 Roadway, Pavement Appurtenances and Fence IP\104.02 Intersections IP\RPRI-20