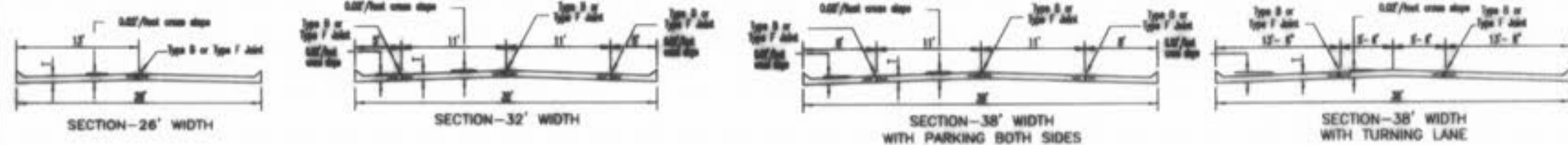
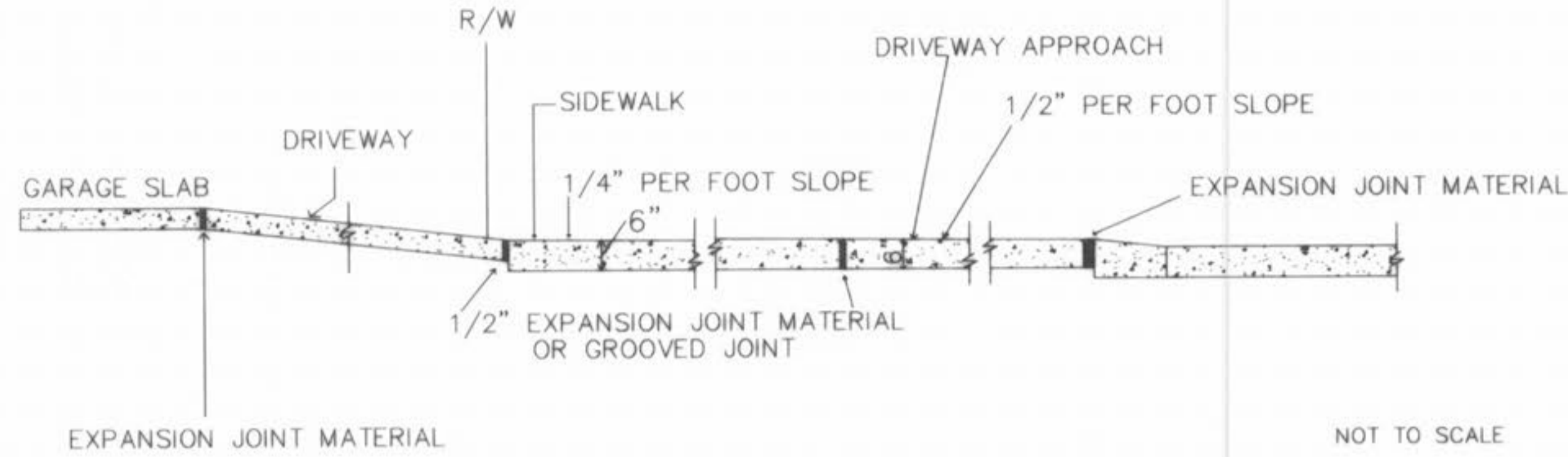


INTEGRAL ROLLED CURB AND CONCRETE PAVEMENT TYPICAL SECTIONS AND DETAILS



GENERAL NOTES

- Do not scale drawing. Follow dimensions.
- All street inlets shall be supported from the pavement and curb by expansion joint material extending completely through curb and slab. Manhole casing within the pavement shall be based on shown.
- When a joint falls within 5ft. of, or contacts inlets, manholes, or other structures, shorten one or more panels either side of opening to permit joint to fall on rounded structures and at or between corners of rectangular structures.
- Driveway configurations are shown in the "Entrance Construction Details".
- Construction joints and tie bars may be omitted when curb is poured monolithic with pavement.
- Minimum Thickness for Pavement is:
  - Residential 26' wide Streets 6"
  - Residential 32'-38' wide Streets 7"
- For joint and bar requirements refer to the Pavement Construction Details for "Joints and Curbs". See Dep. CS02.03. Note that the width and location may change the type of joint required.
- Transverse or longitudinal construction joints in the formed concrete may be made with a groover or tool, if such device has been approved in advance by the Department.
- The location of the type "B" longitudinal construction joint in the sections top is illustrated for the different widths of construction if approved by the Department.



NOT TO SCALE

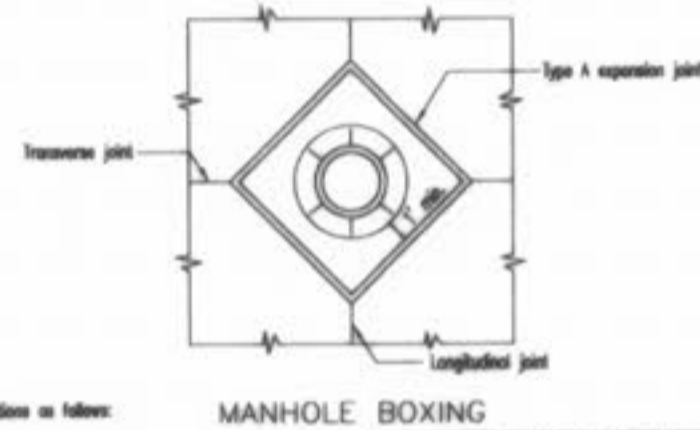
NOTES:

- A 1" JOINT IS REQUIRED AT THE CURB AND GARAGE FOR ALL DRIVEWAYS LOCATED ON THE OUTER EDGE OF CURVED PAVEMENT, UNLESS GROOVED JOINTS ARE USED AT SIDEWALK. THEN A 2" JOINT IS REQUIRED AT CURB.
- A 1/2" JOINT IS REQUIRED AT THE CURB AND GARAGE FOR ALL DRIVEWAYS LOCATED ON TANGENT SECTIONS OF PAVEMENT OR ON THE INNER EDGE OF CURVED PAVEMENT.
- EXPANSION JOINT MATERIAL MUST EXTEND THROUGH THE FULL DEPTH OF THE PAVEMENT.
- SIDEWALK THICKNESS SHALL BE A MINIMUM OF 7" THROUGH COMMERCIAL DRIVEWAYS.

STREET	JOINT TYPE	JOINT AND BAR REQUIREMENTS
3 LANE RESIDENTIAL	Transverse	TYPE C no steel bars
7' thick concrete	Longitudinal	1/2" x 1/2" spaced @ 18" @ 24" min. At the edge between the panel sections TYPE B
	Expansion	TYPE A no steel bars
RESIDENTIAL 2 LANE	Transverse	TYPE C no steel bars
7' thick concrete	Longitudinal	1/2" x 1/2" spaced @ 18" @ 24" min. At the edge between the panel sections TYPE B
	Expansion	TYPE A no steel bars

NOTE

Joint filler material shall meet ASTM designations as follows:  
 Minimum type: ASTM D-581-83  
 Non-staining & rubber like (flex): ASTM D-1751-07  
 Non-staining & rubber like (stiff): ASTM D-5249  
 Joint sealant material shall meet ASTM and AASHTO designations as follows:  
 ASTM D-581-83, AASHTO M-301 or ASTM D-1190-74, AASHTO M-173-84 or latest revisions thereof.



SAINT CHARLES COUNTY HIGHWAY DEPARTMENT ST. CHARLES, MISSOURI  
 PAVEMENT CONSTRUCTION DETAILS  
 INTEGRAL ROLLED CURB AND CONCRETE PAVEMENT TYPICAL SECTIONS AND DETAILS  
 DATE: Oct 08, 2002 DRAWING: CS02.02

SAINT CHARLES COUNTY HIGHWAY DEPARTMENT ST. CHARLES, MISSOURI  
 PAVEMENT CONSTRUCTION DETAILS  
 Integral Curb Detail "B" at Driveways  
 DATE: May, 2002 DRAWING: CS02.05

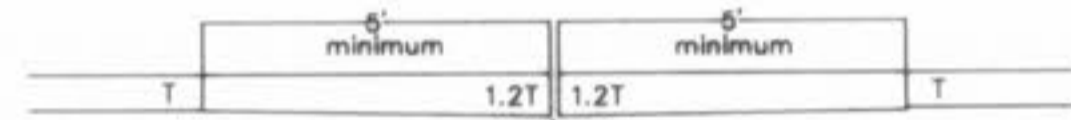
HIDDEN CREEK PAVEMENT DETAILS

ST. CHARLES ENGINEERING & SURVEYING, INC.  
 801 S. FIFTH STREET, SUITE 202  
 ST. CHARLES, MO 63301  
 TEL: (636) 947-0607 FAX: (636) 947-2448



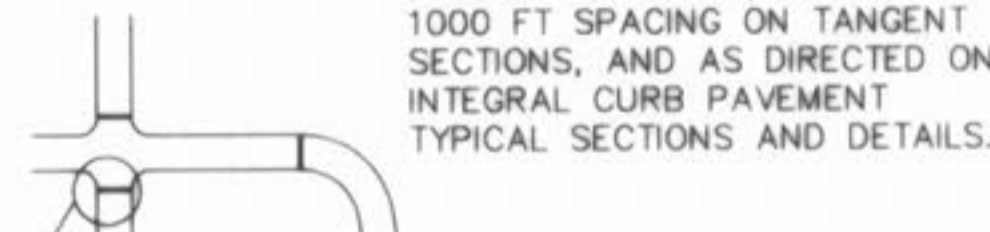
ORDER NO. 02-0162  
 DATE 08-21-08  
 D-1

TYPE A (MODIFIED) CONSTRUCTION JOINT



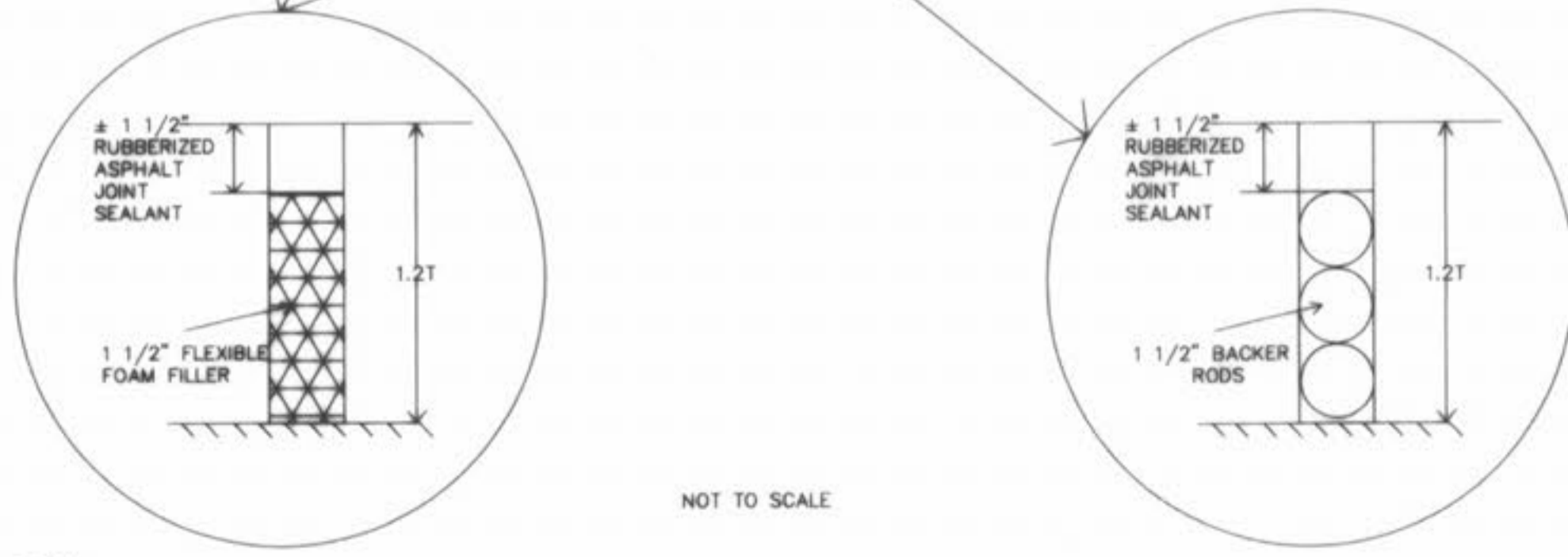
TYPE A (MODIFIED) CONSTRUCTION JOINT SAWED FULL DEPTH (1 1/2" WIDE)

JOINT LOCATION



AT EITHER PC OR PT OF CURVED PAVEMENT, MAXIMUM 1000 FT SPACING ON TANGENT SECTIONS, AND AS DIRECTED ON INTEGRAL CURB PAVEMENT TYPICAL SECTIONS AND DETAILS.

JOINT DETAILS

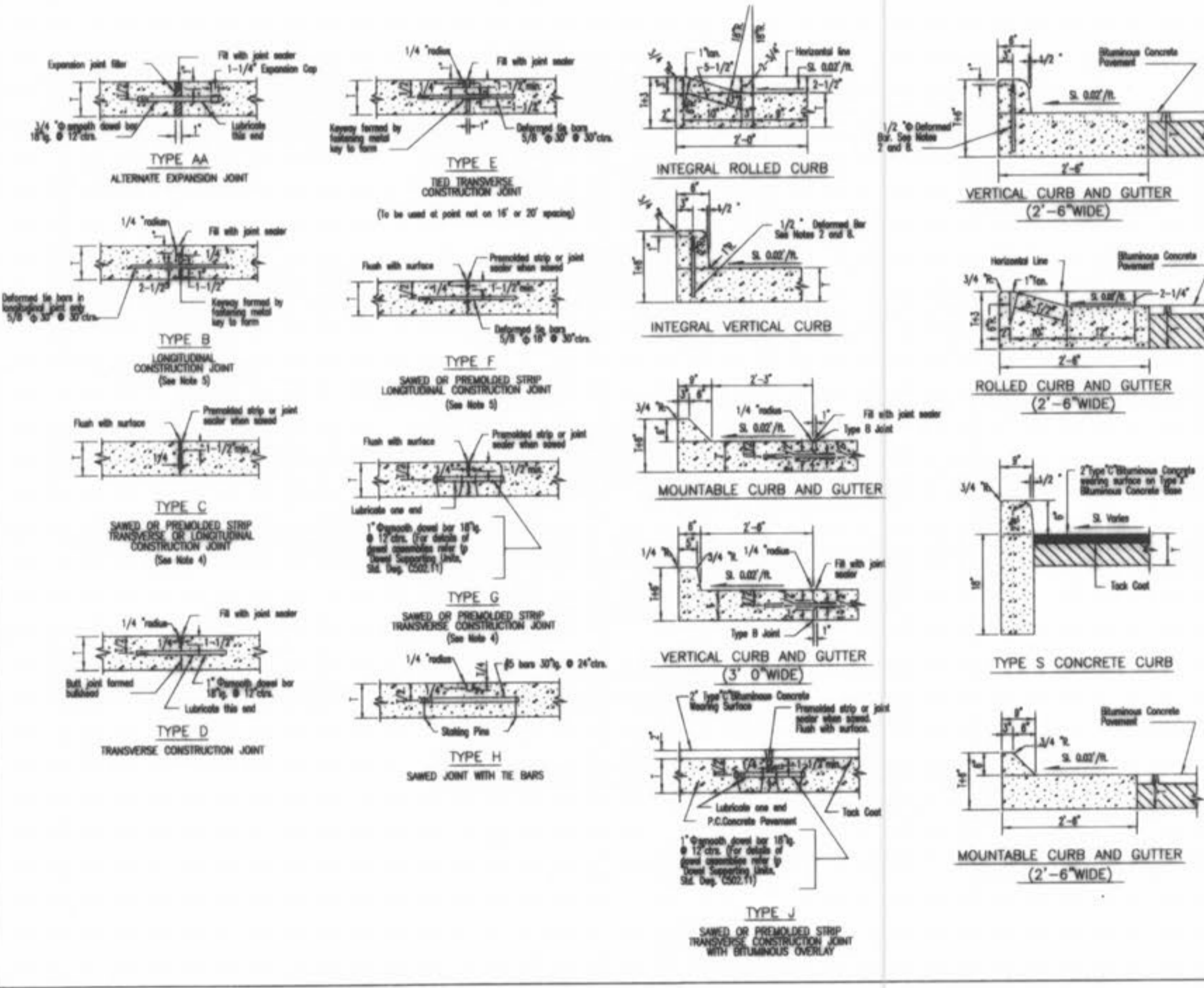


NOT TO SCALE

NOTES:

- THE NUMBER OF BACKER RODS REQUIRED WILL VARY WITH THE PAVEMENT THICKNESS. BACKER RODS AND FLEXIBLE FOAM FILLER MUST EXTEND THROUGH THE FULL DEPTH OF THE PAVEMENT.
- JOINT FILLER SHALL BE A FLEXIBLE, NON-ABSORBENT, NON-GASSING, NON-STAINING, NON-SHRINKING MATERIAL, EXTRUDED FROM A CLOSED-CELL POLYMER, ASTM D-5249.
- JOINT FILLER COMPOSED OF CELLULAR FIBERS, ASTM D-1751, MAY BE USED AT DRIVEWAY, SIDEWALK, AND SEWER INLET AND MANHOLE LOCATIONS.
- SEE "INTEGRAL CURB DETAIL "B" AT DRIVEWAYS" FOR EXPANSION JOINT REQUIREMENTS AT DRIVEWAY CONNECTIONS TO THE STREET AND THE GARAGE.

SAINT CHARLES COUNTY HIGHWAY DEPARTMENT ST. CHARLES, MISSOURI  
 PAVEMENT CONSTRUCTION DETAILS  
 Type "A" Expansion Joint  
 DATE: May, 2002 DRAWING: CS02.04



GENERAL NOTES

- Do not scale drawing. Follow dimensions.
- Construction joint and tie bars may be omitted when curb is poured integral with pavement.
- Minimum Thickness for Pavement is:
  - Concrete Pavement Thickness = (1) 6"
  - All Residential Street and Local Streets 7"
  - Residential Collector and Non-Residential Streets 8"
  - All Arterial Streets 12"
- Type "C" Transverse Joint is required for Arterial and Non-Residential Streets. Use Type "C" Transverse Joint for all others.
- For Suburban or other Streets having 6" concrete pavement, 1/2" diameter tie bars, 30" long at 30" centers shall be used for Type "C" longitudinal joints and 1/2" diameter tie bars, 18" long at 30" centers shall be used for Type "C" longitudinal joints.
- Refer to Pavement Construction Details for Integral Rolled Curb and Concrete Pavement Typical Sections and Details. See Dep. CS02.01 and Integral Rolled Curb and Concrete Pavement Typical Sections and Details. See Dep. CS02.02 for joint and bar requirements for different street classifications. Note that width and location of each member portion of the pavement may change the type and location of joint required.
- All dimension bars for joints and curbs shall be flat steel bars conforming to ASTM A615-70, Grade 60.
- Length of the tie bars shall equal the thickness of pavement plus the height of curb less bars shall be placed @ 24" centers.
- Transverse or longitudinal construction joints in the formed concrete may be made with a groover or tool, if such device has been approved in advance by the Department.
- The free end of the steel bar for a length of at least 12 inches shall be coated with an approved grease.
- All steel bars 1 1/2", @ 12" c/s. shall be epoxy coated.

SAINT CHARLES COUNTY HIGHWAY DEPARTMENT ST. CHARLES, MISSOURI  
 PAVEMENT CONSTRUCTION DETAILS  
 JOINTS AND CURBS  
 DATE: September, 2002 DRAWING: CS02.03

O'Fallon File Number 1002.02