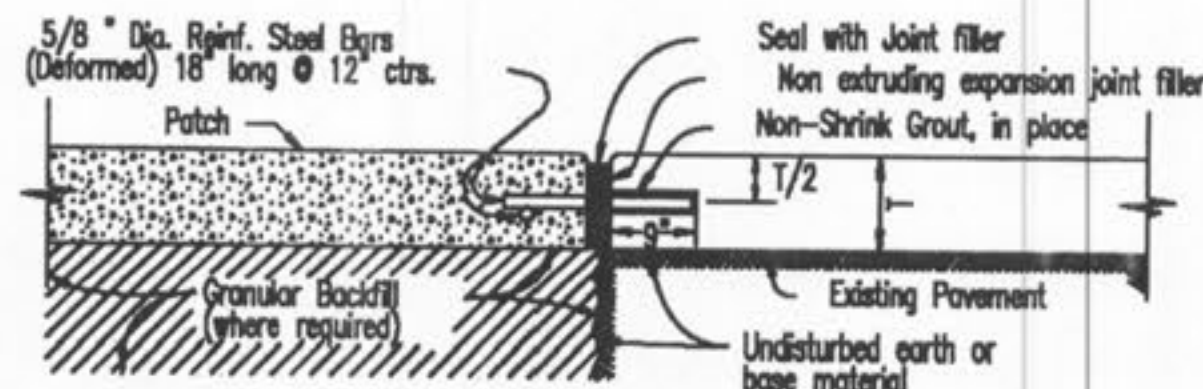
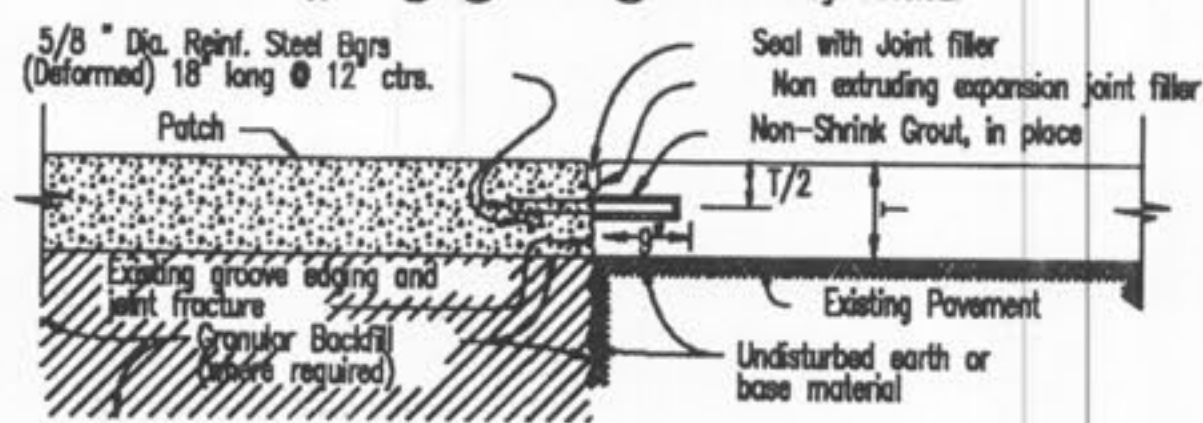


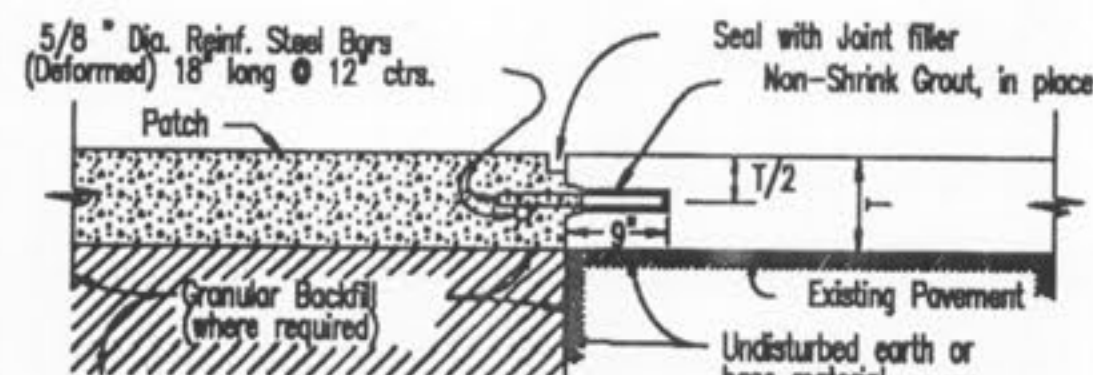
PATCH CONSTRUCTION DETAILS



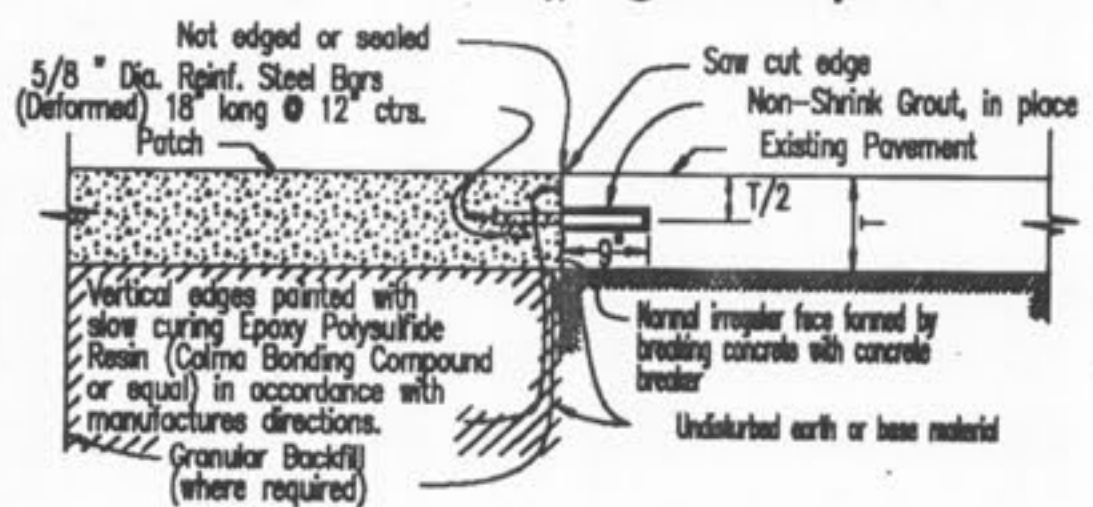
**DETAIL "A"**  
To be used where patch is adjacent to transverse joints - See Patch Types ①, ② and ③ on Std. Dwg. C613.02.



**DETAIL "B"**  
To be used where patch is adjacent to transverse joints - See Patch Types ①, ② and ③ on Std. Dwg. C613.02.



**DETAIL "C"**  
To be used where patch is adjacent to longitudinal keyed joint - See Patch Type ③ on Std. Dwg. C613.02.



**DETAIL "D"**  
To be used where patch is adjacent to existing concrete where no joint is located - See Patch Types ①, ② and ③ on Std. Dwg. C613.02.

GENERAL NOTES

- For additional details refer to Std. Dwg. C613.02 and C613.03, also refer to the Saint Charles County Standard Specifications for Highway Construction Section 613.
- Minimum Thickness for Pavement Replacement is:
 

CONCRETE (1)	CONCRETE (2)
All Residential Minor and Local Streets	6"
Residential Collector, All County and Non-Residential Streets	7"
All Arterial Streets	8"
- Where base material exists under pavements, replacement will be made with 4" Type 1 or Type 5 Aggregate Base Course. Granular backfill and Base will be compacted by mechanical tamping methods in lifts no greater than 8 inches.
- Wherever tiebars, tiebolts, dowels or other load transfer devices are found in a joint the exposed ends will be cleaned and left in place. All smooth slip dowels should be straightened if necessary and greased prior to placing the patch.

SAINT CHARLES COUNTY  
HIGHWAY DEPARTMENT  
ST. CHARLES, MISSOURI

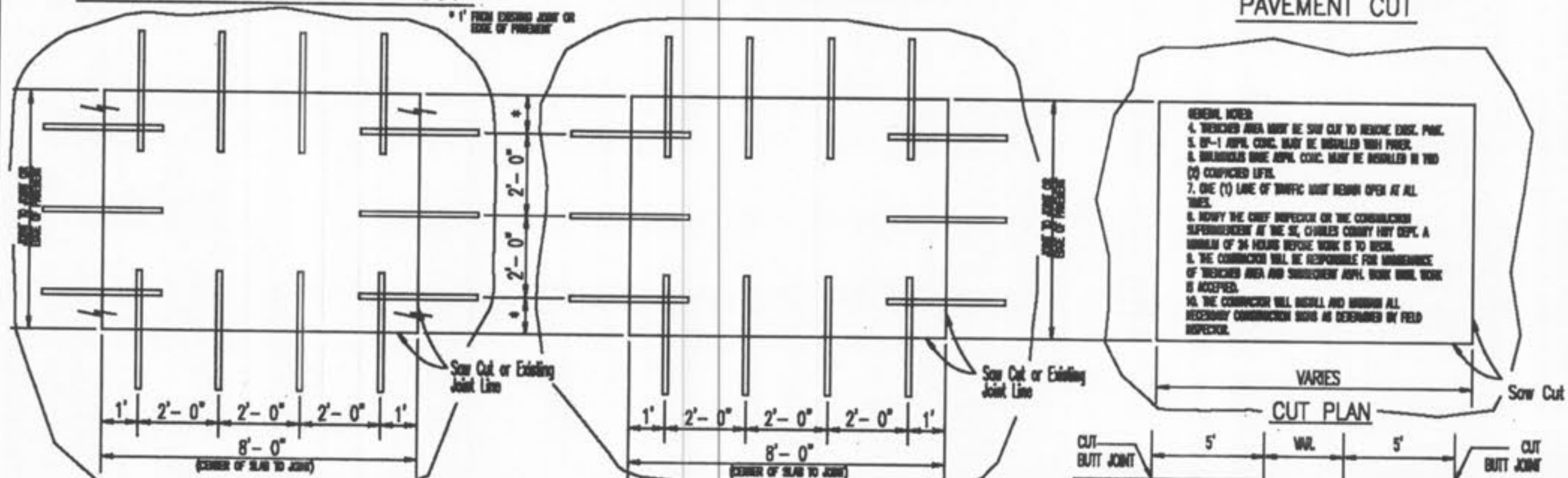
CONSTRUCTION DETAILS  
FOR CONCRETE PATCHES

DATE: November, 2002 DRAWING C613.01

BITUMINOUS CONCRETE OVER CONCRETE PAVEMENT CUT

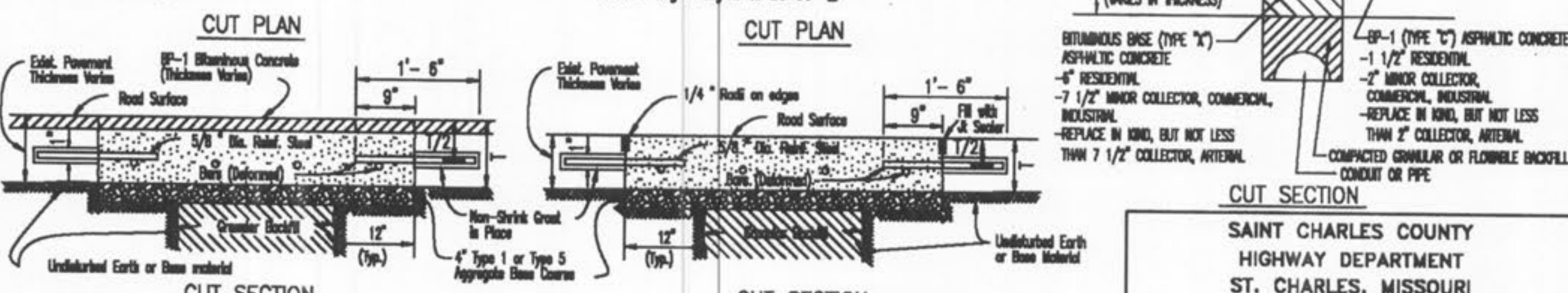
CONCRETE PAVEMENT CUT

BITUMINOUS CONCRETE PAVEMENT CUT



NOTE: Right Angles to be 90° ±

NOTE: Right Angles to be 90° ±



GENERAL NOTES

- If a permit is issued to replace the existing aggregate concrete pavement with full depth bituminous concrete pavement and concrete pavement is found under the existing aggregate concrete pavement, the applicant will be required to follow the Detail for Bituminous Concrete over Concrete Pavement Cut. The applicant will use Dowels or equivalent to replace the existing concrete and use 4" Type 1 or Type 5 Aggregate over Granular Backfill or Paving as a sub-base. Dowels set up in approximately 4 hours at which time the EP-1 Bituminous Concrete Overlay can be applied to the base course.
- If Bituminous Concrete over Concrete Pavement or Concrete Pavement is broken before installing the pavement full concrete slab replacement will be required.
- Minimum Thickness for Pavement Replacement is:
 

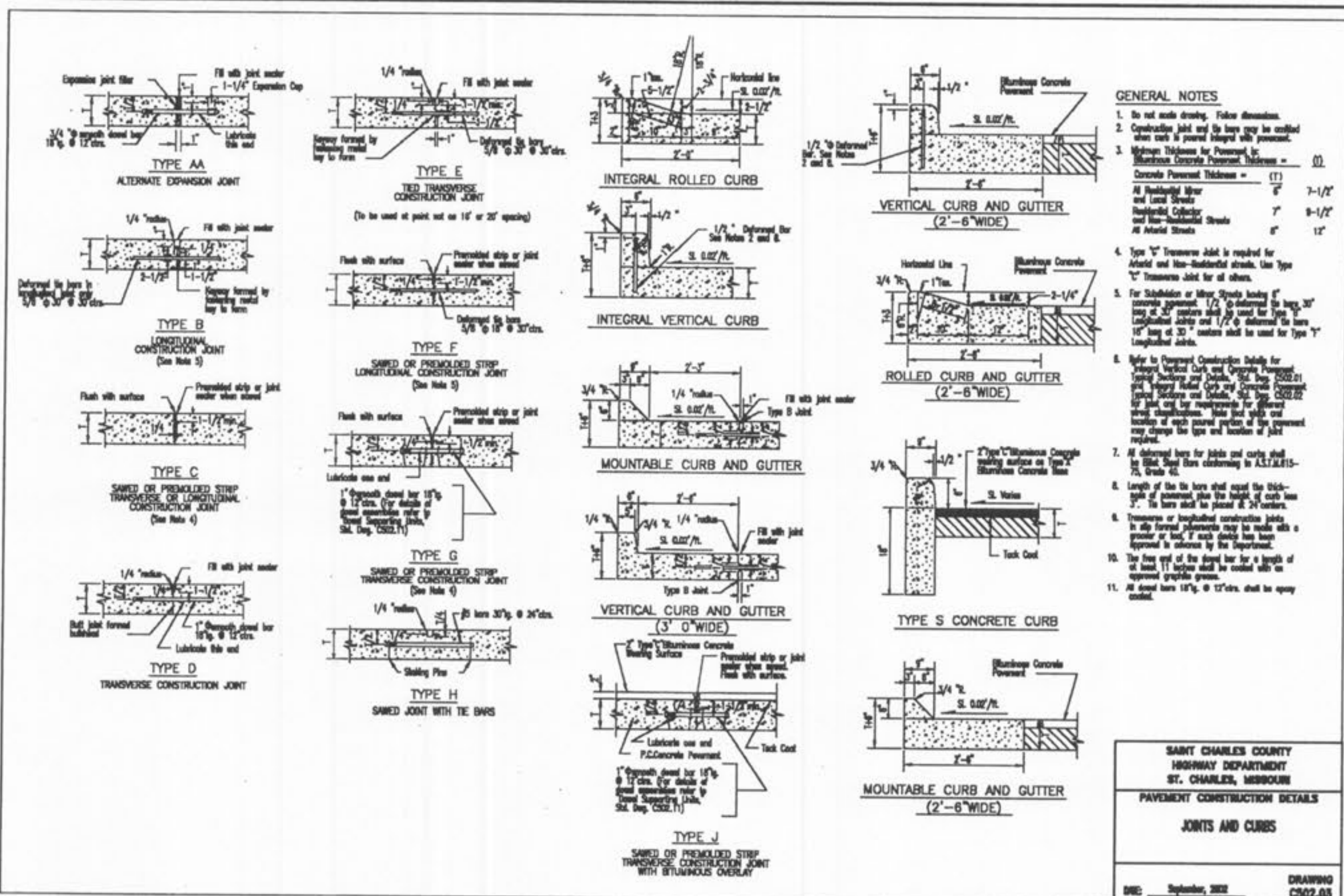
CONCRETE (1)	BITUMINOUS (1)
All Residential Minor and Local Streets, Residential Collector, All County and Non-Residential Streets, All Arterial Streets	7"
	8 1/2"
	12"

 Pavement replacement will require 4" Type 1 or Type 5 Aggregate Base Course, Granular Backfill and Base will be compacted by mechanical tamping methods in lifts no greater than 8 inches.

SAINT CHARLES COUNTY  
HIGHWAY DEPARTMENT  
ST. CHARLES, MISSOURI

DETAILS OF TEMPORARY OPENINGS IN ROADWAY PAVEMENT

DATE: October, 2002 DRAWING C613.00

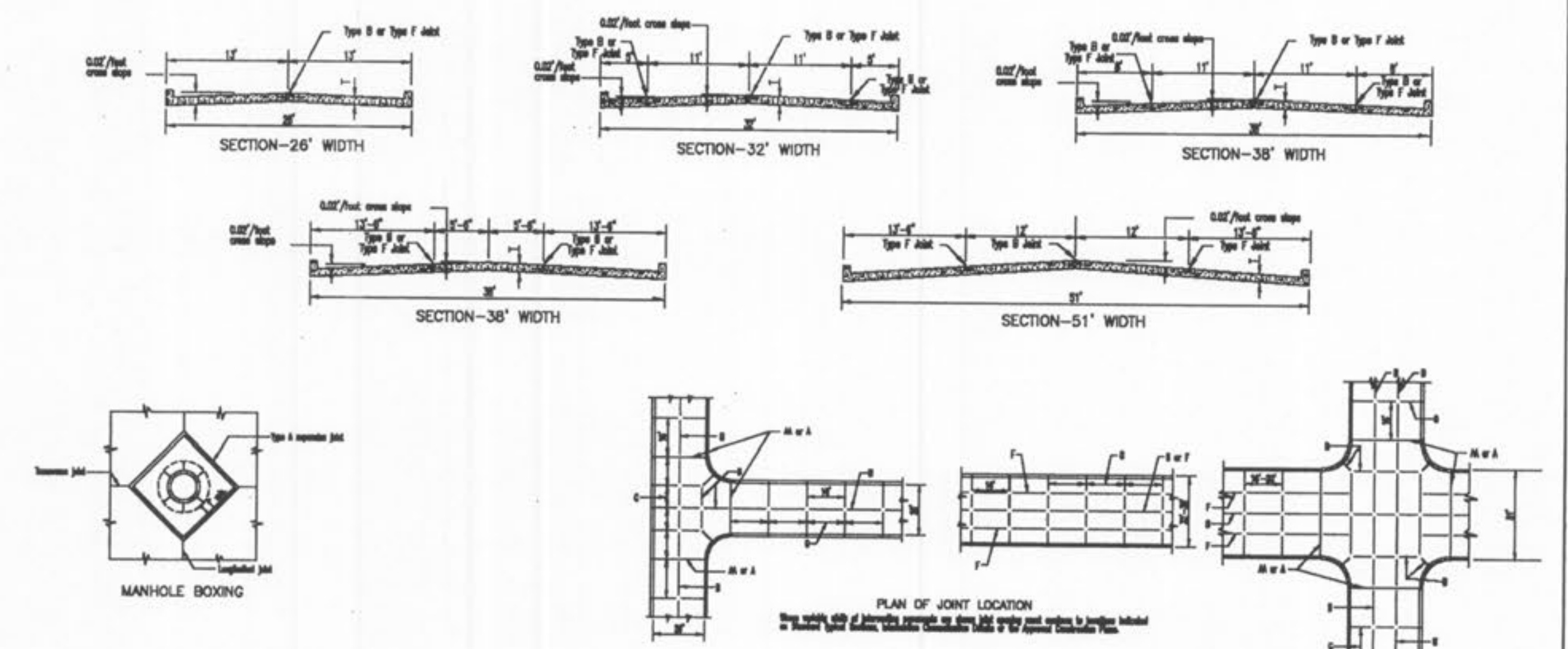


- GENERAL NOTES
- Do not scale drawing. Fabric dimension.
  - Construction joint and its location shall be indicated on all plans and profiles.
  - Minimum thickness for concrete:
 

Concrete Thickness	(1)	(2)
All Residential Minor and Local Streets, Residential Collector and Non-Residential Streets, All Arterial Streets	7"	8 1/2"
	8"	12"
  - Type "Y" Transverse Joint is required for all curb and non-bituminous streets. Use Type "Y" Transverse Joint for all others.
  - For Suburban or other streets having 4" concrete pavement, 1 1/2" is determined for 3'-0" long of 20" radius and 1 1/2" is determined for 3'-0" long of 20" radius shall be used for Type "Y" Transverse Joint.
  - Refer to Pavement Construction Details for Integral Vertical Curb and Gutter for details on curb and gutter construction. The curb and gutter shall be constructed in accordance with the details shown in this drawing. The curb and gutter shall be constructed in accordance with the details shown in this drawing.
  - All subgrade for curb and gutter shall be compacted to 95% Proctor density in 4" lifts.
  - Length of the curb shall equal the length of the gutter. The curb and gutter shall be constructed in accordance with the details shown in this drawing.
  - Transverse or longitudinal construction joints in curb and gutter shall be made with a minimum of 4" of concrete and shall be approved in advance by the Department.
  - The top edge of the curb for a length of at least 11' shall be made with a smooth finish.
  - All curb less than 18" or 12" shall be spray coated.

SAINT CHARLES COUNTY  
HIGHWAY DEPARTMENT  
ST. CHARLES, MISSOURI  
PAVEMENT CONSTRUCTION DETAILS  
JOINTS AND CURBS  
DATE: September, 2002 DRAWING C602.03

INTEGRAL VERTICAL CURB AND CONCRETE PAVEMENT TYPICAL SECTIONS AND DETAILS



- GENERAL NOTES
- Do not scale drawing. Fabric dimension.
  - All curb shall be constructed from the pavement and curb shall be constructed with the pavement. The curb and gutter shall be constructed in accordance with the details shown in this drawing.
  - Transverse or longitudinal construction joints in curb and gutter shall be made with a minimum of 4" of concrete and shall be approved in advance by the Department.
  - The location of the curb and gutter shall be approved in advance by the Department.
  - The top edge of the curb for a length of at least 11' shall be made with a smooth finish.
  - All curb less than 18" or 12" shall be spray coated.
- NOTE: All curb shall be constructed from the pavement and curb shall be constructed with the pavement. The curb and gutter shall be constructed in accordance with the details shown in this drawing.

STREET	JOB TYPE	JOB AND CURB REQUIREMENTS
All Arterial, Residential	Transverse	Type E, 1 1/2" smooth round bars 18" x 12" dia.
3'-0" wide pavement	Longitudinal	With 1" smooth round bars 18" x 12" dia. 1/2" x 12" x 12" x 12" dia. 1/2" x 12" x 12" x 12" dia.
7'-0" wide pavement	Dependent	Type AA, 1 1/2" smooth round bars 18" x 12" dia.

SAINT CHARLES COUNTY  
HIGHWAY DEPARTMENT  
ST. CHARLES, MISSOURI  
PAVEMENT CONSTRUCTION DETAILS  
INTEGRAL VERTICAL CURB AND CONCRETE PAVEMENT TYPICAL SECTIONS AND DETAILS  
DATE: October, 2002 DRAWING C602.01

PLANNING & DEVELOPMENT #1804.08 APPROVED AUGUST 6, 2009  
J-MARK DRIVE PAVEMENT DETAILS  
**WOODBURY PLACE**  
ST. CHARLES COUNTY, O'FALLON, MISSOURI

Engineering Surveys & Services  
1113 Fay Street  
Columbia, Missouri  
573-449-2646  
Missouri Engineering Corporation # 204005018

Surveyed: [Signature]  
Drawn: BR  
Checked: TOC/MK  
Scale: AS SHOWN  
Date: APRIL 2, 2010  
Job: 11354  
Sheet: 2 of 2

MATTHEW A. KRITZ  
PROFESSIONAL ENGINEER  
PE-2007022811