

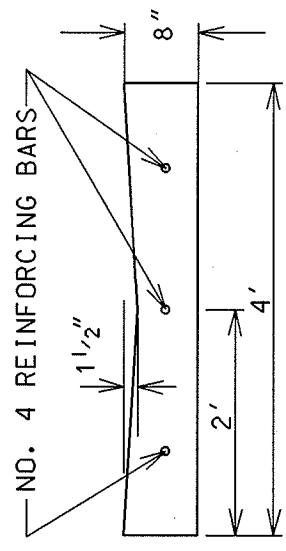
**GENERAL NOTES:**

SPECIAL WATERWAY DETAIL SHALL BE USED WHEN SPECIFIED ON THE PLAN IN LIEU OF A SLOPE GUTTER AT STREET INTERSECTIONS

SPECIAL WATERWAY SHALL BE MEASURED AND PAID FOR BY THE SQUARE FOOT

REINFORCING BARS SHALL BE EPOXY COATED AND INSTALLED IN THE SPECIAL WATERWAY AS SHOWN AND SHALL BE INCIDENTAL TO THE SPECIAL WATERWAY

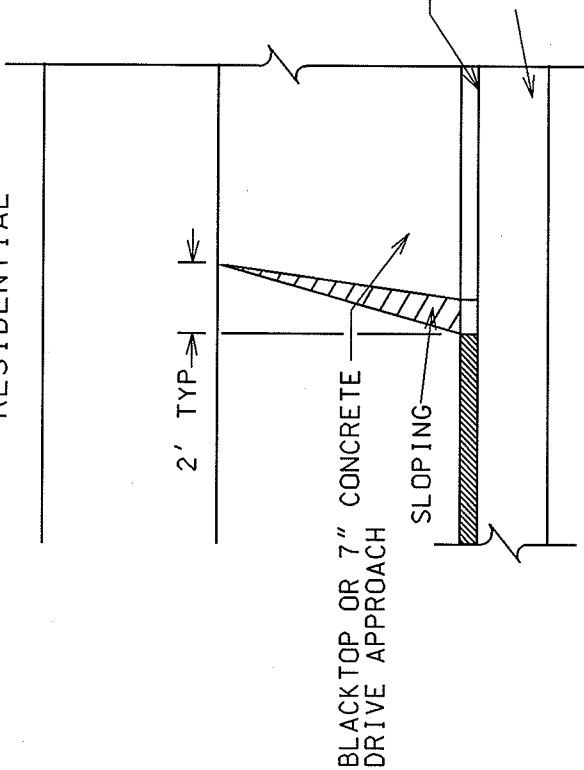
**SECTION A-A**



2004

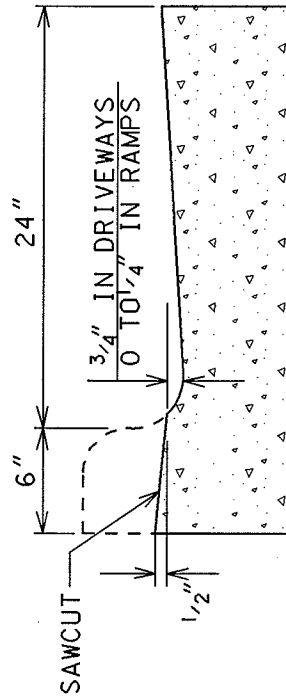
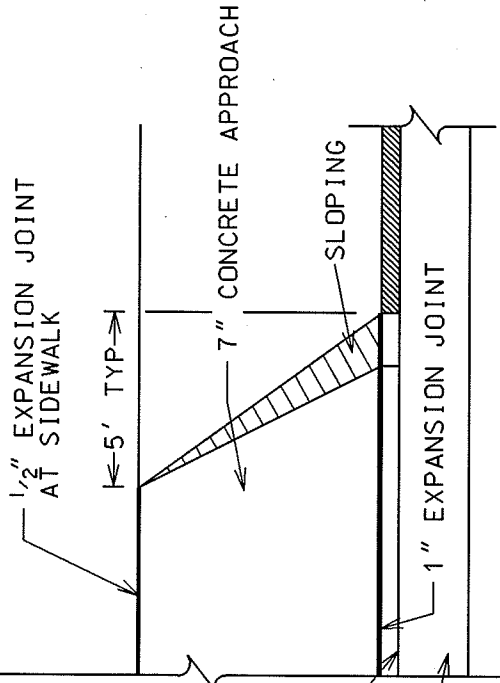
CITY OF MADISON ENGINEERING DIVISION
<b>STANDARD SPECIAL WATERWAY</b>
STANDARD DETAIL DRAWING 3.01

RESIDENTIAL



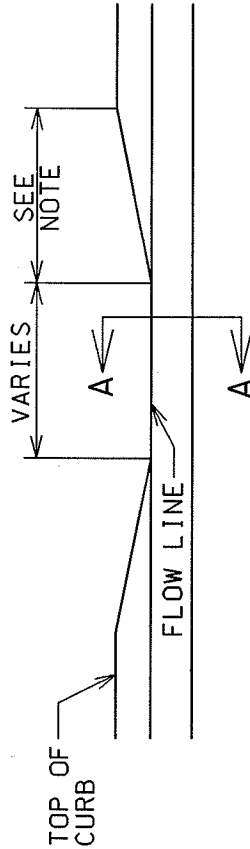
EXPANSION JOINTS IN ACCORDANCE WITH REQUIREMENTS OF 302.2d and 303.2d

COMMERCIAL



DRIVEWAY SECTION TYPE 'A'  
CONCRETE CURB & GUTTER

SECTION A-A



NOTE:  
12" TO 18" TAPER FOR STANDARD DRIVEWAY APPROACH  
18" TO 24" TAPER FOR STANDARD RAMP

TYPICAL CURB CUT TAPER

GENERAL NOTE:

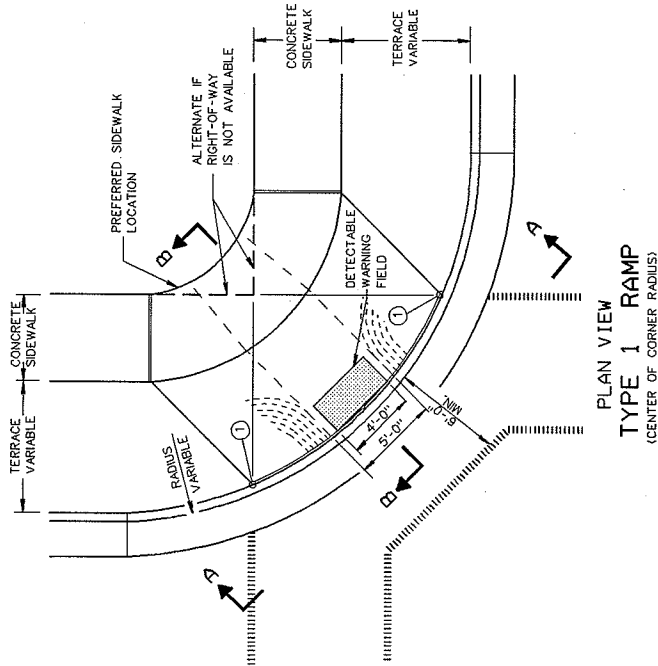
IF THE CURB CUT IS NOT CONSTRUCTED WITH THE INITIAL CURB AND GUTTER CONSTRUCTION, THE CURB CUT CAN BE MADE BY REMOVING AND REPLACING THE ENTIRE CURB AND GUTTER SECTION OR BY SAWCUTTING THE EXISTING CURB HEAD BY MEANS OF A SPECIAL SAW DESIGNED TO MEET THE DETAILS ABOVE FOR MADISON STANDARD CURB CUTS.

2004

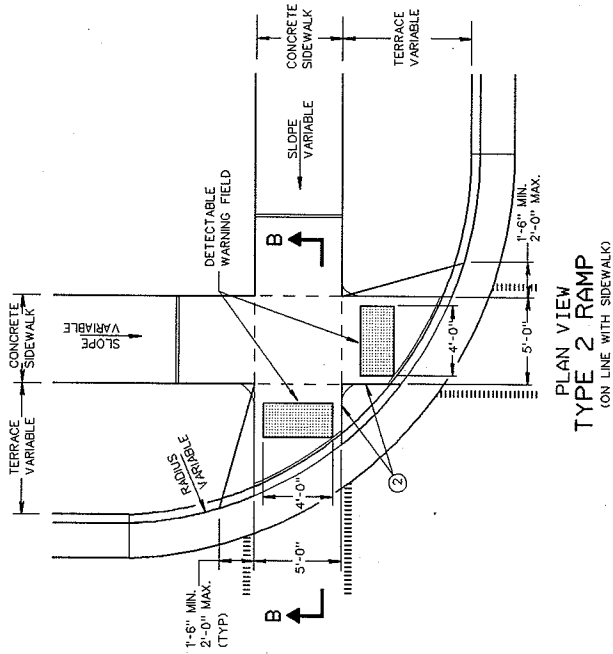
CITY OF MADISON  
ENGINEERING DIVISION

MADISON STANDARD  
CURB CUT DETAILS

STANDARD DETAIL DRAWING 3.02



PLAN VIEW  
TYPE 1 RAMP  
(CENTER OF CORNER RADIUS)



PLAN VIEW  
TYPE 2 RAMP  
(ON LINE WITH SIDEWALK)

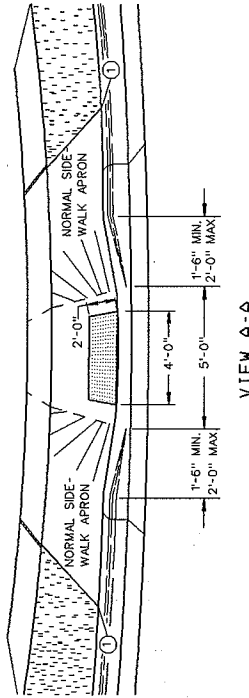
NOTE: MATERIALS AND METHOD OF CONSTRUCTION FOR TRUNCATED DOMES SHALL BE SPECIFIED IN SPECIAL PROVISIONS OR AS REQUIRED BY THE CITY ENGINEER

**GENERAL NOTES**

TYPE 2-A RAMP SHALL BE USED IN NEW DEVELOPMENTS UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.  
 DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.  
 RAMP SHALL BE BUILT AT 12H:V OR FLATTER, WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAD BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD".  
 CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES SHALL BE APPROVED BY THE CITY ENGINEER. THE COLOR OF THE DETECTABLE WARNING FIELD SHALL BE SAFETY YELLOW AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".  
 SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- ② WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.



VIEW A-A

**LEGEND**

1/2" ———	EXPANSION JOINT-SIDEWALK
- - -	CONTRACTION JOINT FIELD LOCATED
	PAVEMENT MARKING, WHITE, 6-INCH
- - -	ALTERNATIVE LAYOUT

CITY OF MADISON  
ENGINEERING DIVISION

**STANDARD CURB RAMP  
TYPES 1 AND 2**

STANDARD DETAIL DRAWING 3.03

### GENERAL NOTES

TYPE 2-A RAMP SHALL BE USED IN NEW DEVELOPMENT UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

RAMPS SHALL BE BUILT AT 12HIV OR FLATTER, WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD".

CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES SHALL BE APPROVED BY THE CITY ENGINEER. THE COLOR OF THE DETECTABLE WARNING FIELD SHALL BE SAFETY YELLOW AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

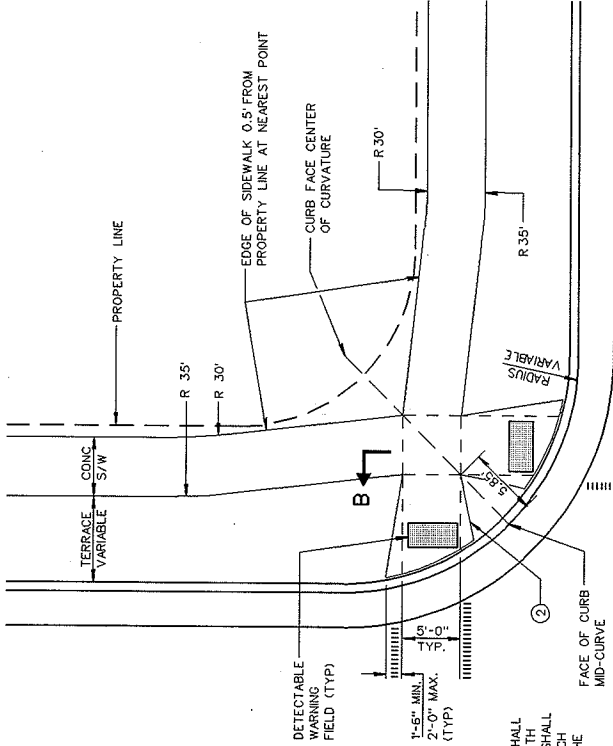
① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

② WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12HIV SLOPE, OR FLATTER, ON RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12HIV SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

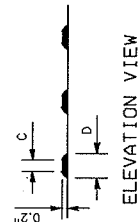
### LEGEND

- 1/2" EXPANSION JOINT- SIDEWALK
- - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- - - - ALTERNATIVE LAYOUT

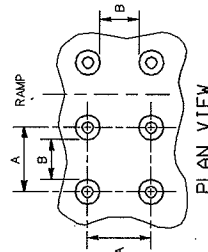
THE NEAR CORNER OF THE LANDING SHALL BE 5.85' FROM THE FACE OF CURB BOTH OPPOSITE CORNERS OF THE LANDING SHALL BE LOCATED ON THE RADIUS LINE WHICH PASSES THROUGH THE MIDPOINT OF THE CURB CURVATURE



PLAN VIEW  
TYPE 2A RAMP



ELEVATION VIEW



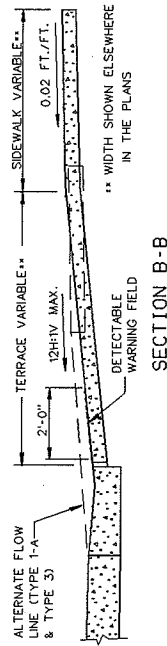
PLAN VIEW

	MIN.	MAX.
A	1.6"	2.4"
B	0.66"	1.5"
C	*	*
D	0.9"	1.4"

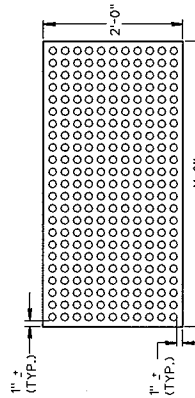
\* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

TRUNCATED DOMES  
DETECTABLE WARNING  
PATTERN DETAIL

NOTE: MATERIALS AND METHOD OF CONSTRUCTION FOR TRUNCATED DOMES SHALL BE SPECIFIED IN SPECIAL PROVISIONS OR AS REQUIRED BY THE CITY ENGINEER



SECTION B-B



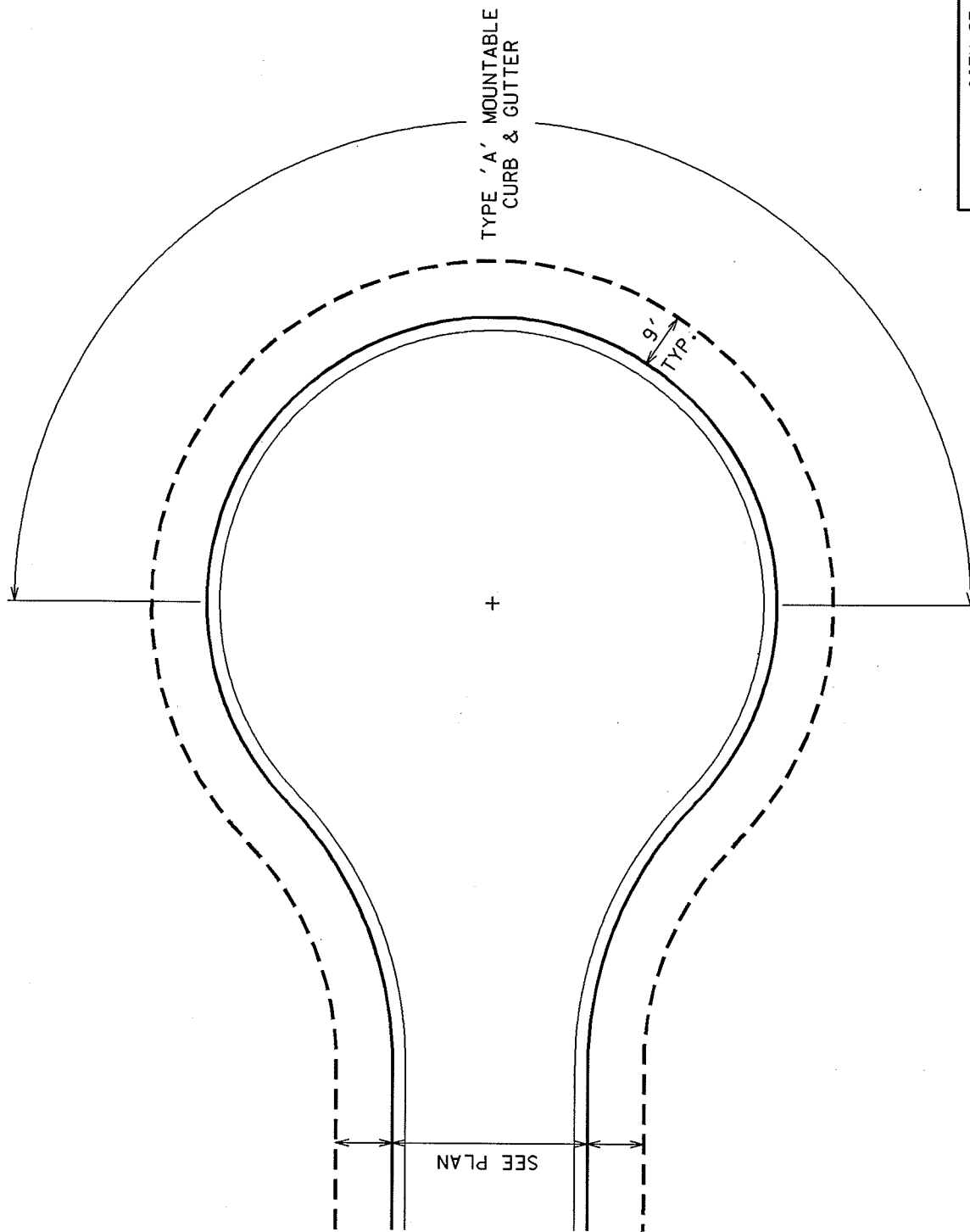
PLAN VIEW  
DETECTABLE WARNING  
FIELD (TYPICAL)

2004

CITY OF MADISON  
ENGINEERING DIVISION

CURB RAMPS GENERAL  
AND  
CURB RAMP TYPE 2-A

STANDARD DETAIL DRAWING 3.04

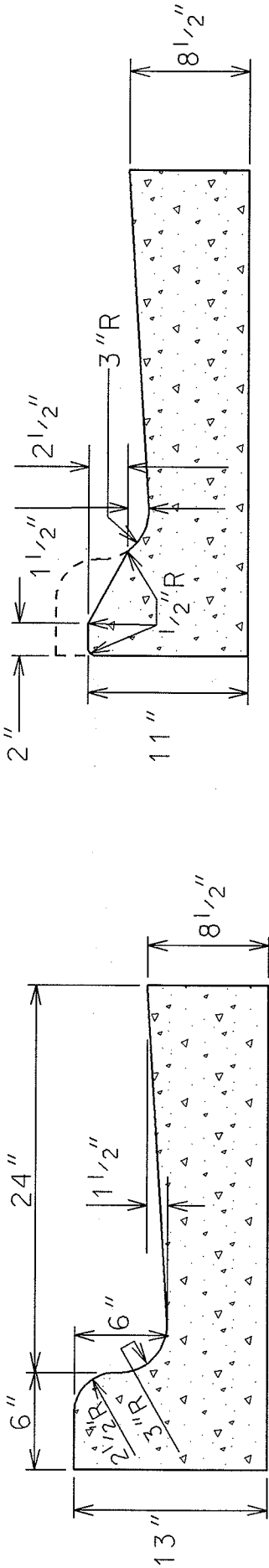


2004

CITY OF MADISON  
ENGINEERING DIVISION

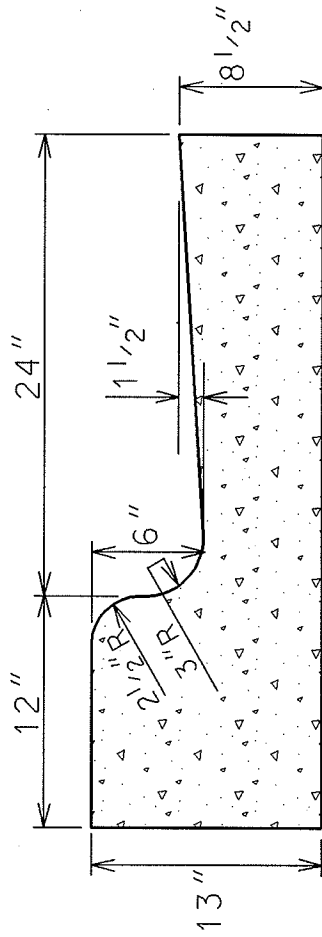
CURB & GUTTER  
DETAIL AT END  
OF CUL-DE-SAC

STANDARD DETAIL DRAWING 3.05

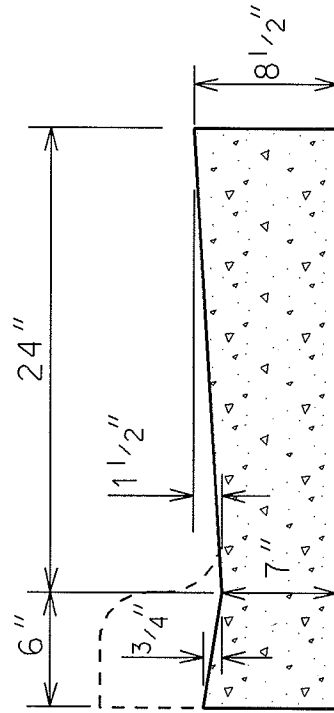


TYPE 'A' CONCRETE  
CURB & GUTTER

TYPE 'A' MOUNTABLE CONCRETE  
CURB & GUTTER  
(PAY AS TYPE 'A' CURB AND GUTTER)



TYPE 'B' CONCRETE  
CURB & GUTTER



DRIVEWAY SECTION TYPE 'A'  
CONCRETE CURB & GUTTER  
(PAY AS TYPE 'A' CURB AND GUTTER)

GENERAL NOTES:

LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 15' NOR LESS THAN 6' IN LENGTH. THE JOINTS SHALL BE A MINIMUM OF 3" IN DEPTH

EXPANSION JOINTS SHALL BE PLACED TRANSVERSELY AT RADIUS POINTS ON CURVES OF RADIUS 200' OR LESS, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER. THE EXPANSION JOINT SHALL BE A ONE PIECE ASPHALTIC MATERIAL HAVING THE SAME DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE 1/2" THICK.

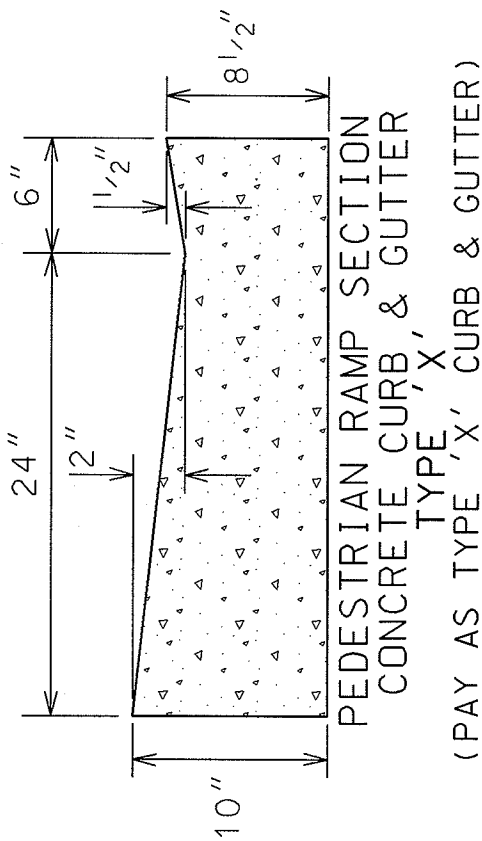
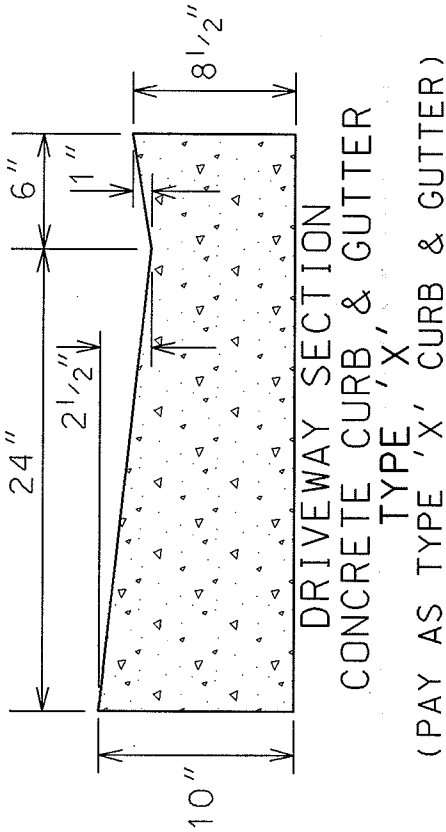
IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED CRUSHED STONE

2004

CITY OF MADISON  
ENGINEERING DIVISION

MADISON STANDARD  
CONCRETE CURB & GUTTER

STANDARD DETAIL DRAWING 3.06

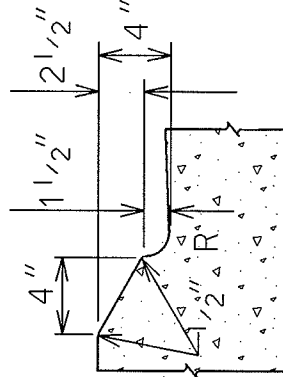
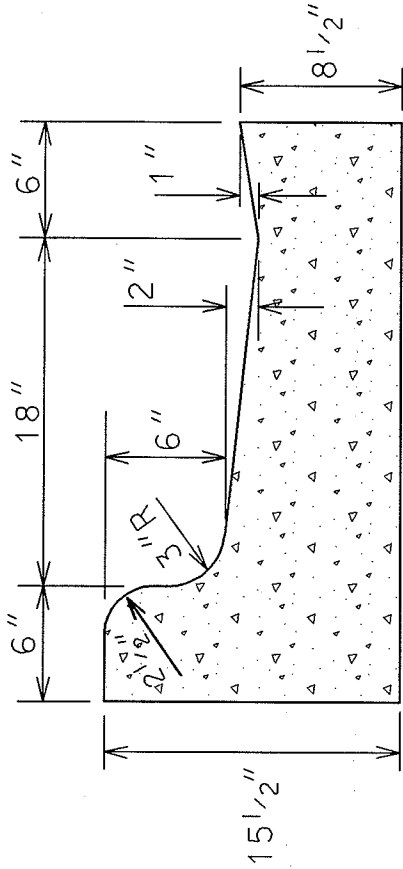


**GENERAL NOTES:**

LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 15' NOR LESS THAN 6' IN LENGTH. THE JOINTS SHALL BE A MINIMUM OF 3" IN DEPTH

EXPANSION JOINTS SHALL BE PLACED TRANSVERSELY AT RADIUS POINTS ON CURVES OF RADIUS 200' OR LESS, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER. THE EXPANSION JOINT SHALL BE A ONE PIECE ASPHALTIC MATERIAL HAVING THE SAME DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE 1/2" THICK.

IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED CRUSHED STONE

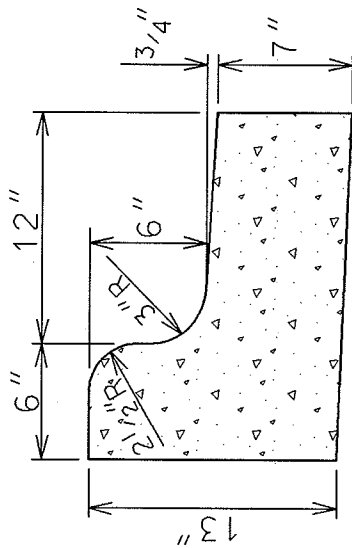


2004

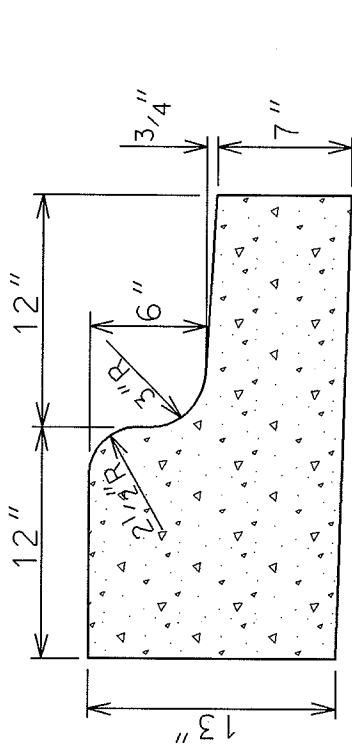
CITY OF MADISON  
ENGINEERING DIVISION

MADISON STANDARD  
CONCRETE CURB & GUTTER

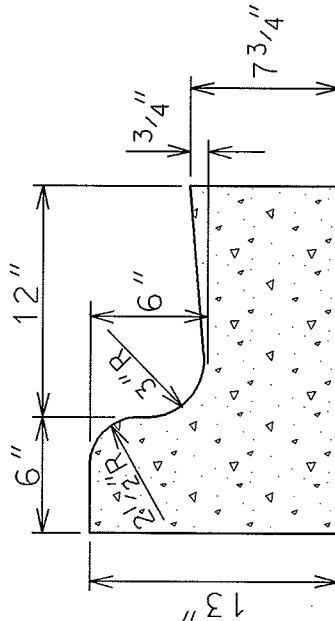
STANDARD DETAIL DRAWING 3.07



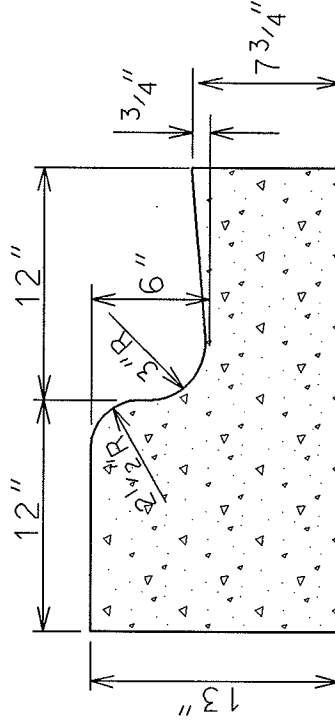
TYPE 'D' CONCRETE  
CURB & GUTTER



TYPE 'E' CONCRETE  
CURB & GUTTER



TYPE 'G' CONCRETE  
CURB & GUTTER



TYPE 'H' CONCRETE  
CURB & GUTTER

**GENERAL NOTES:**

LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 15' NOR LESS THAN 6' IN LENGTH. THE JOINTS SHALL BE A MINIMUM OF 3" IN DEPTH

EXPANSION JOINTS SHALL BE PLACED TRANSVERSELY AT RADIUS POINTS ON CURVES OF RADIUS 200' OR LESS, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER. THE EXPANSION JOINT SHALL BE A ONE PIECE ASPHALTIC MATERIAL HAVING THE SAME DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE 1/2" THICK.

IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED CRUSHED STONE

2004

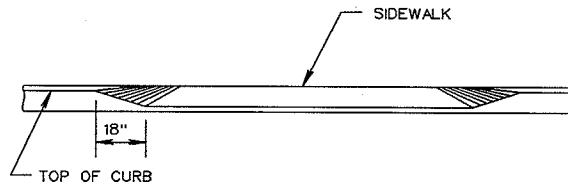
CITY OF MADISON  
ENGINEERING DIVISION

MADISON STANDARD  
CONCRETE CURB & GUTTER

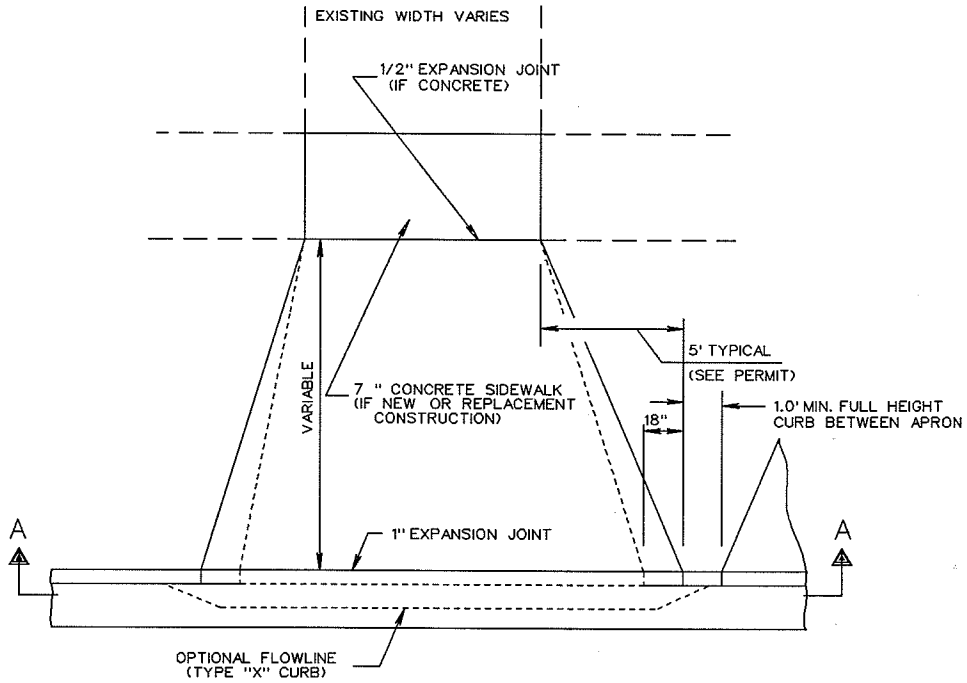
STANDARD DETAIL DRAWING 3.08



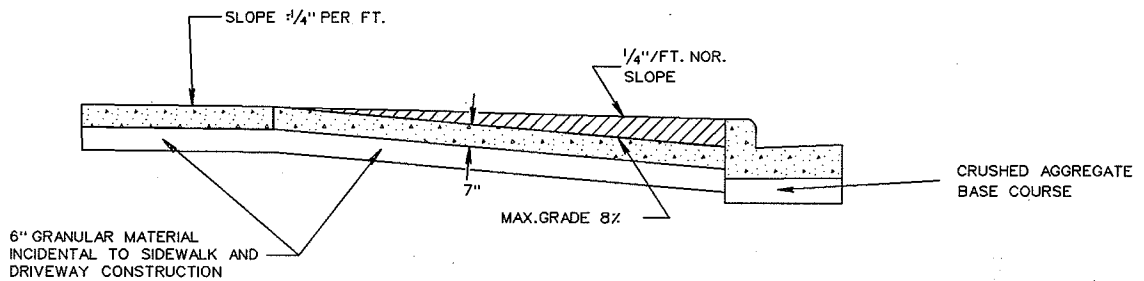
COMMERCIAL DRIVEWAY DETAIL



SECTION A-A



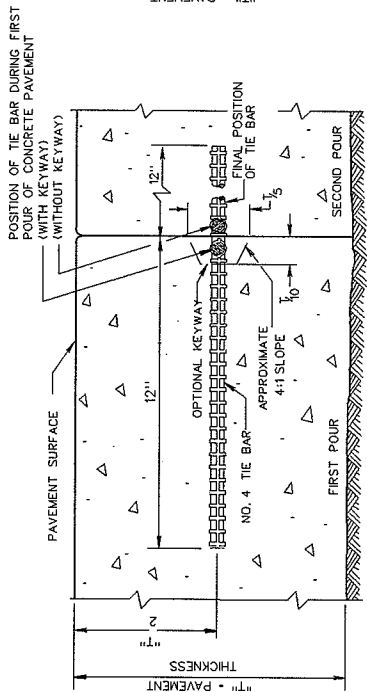
PLAN



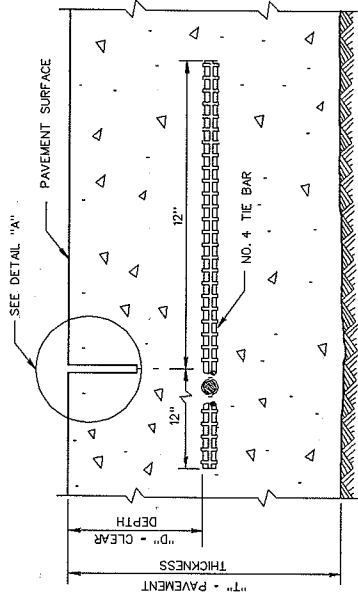
PROFILE

2004

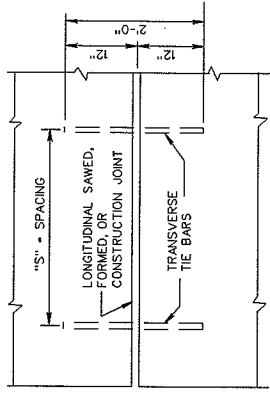
CITY OF MADISON ENGINEERING DIVISION
<b>MADISON STANDARD COMMERCIAL DRIVE DETAILS</b>
STANDARD DETAIL DRAWING 3.09



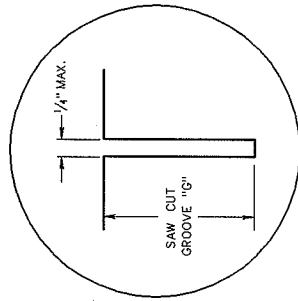
CONSTRUCTION JOINT



SAWED JOINT



PLAN VIEW  
SHOWING LOCATION OF TIE BARS



DETAIL "A"

GENERAL NOTES

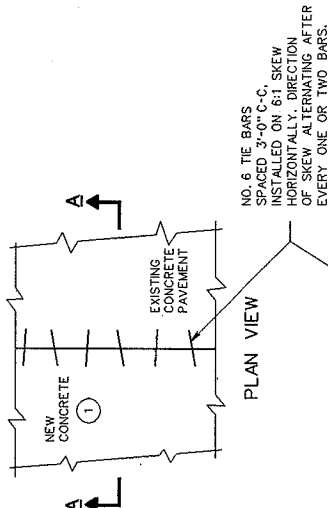
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TIES FOR NEW TO NEW CONSTRUCTION SHALL BE INCIDENTAL TO THE CONCRETE ITEM.

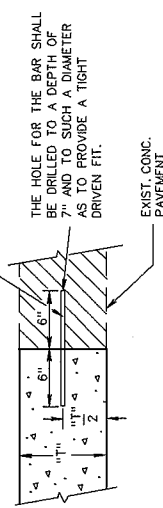
LONGITUDINAL JOINTS SHALL NOT BE SEALED OR FILLED.

TIE BAR SPACINGS ARE VALID ONLY FOR PAVEMENT WIDTHS IN THE TABLE. FOR WIDER PAVEMENTS, TIED SHOULDERS OR RAMPS, THE TIE BAR SPACING SHALL BE AS SHOWN ON THE PLANS.

- 1 NEW CONCRETE INCLUDES NEW CURB & GUTTER, SURFACE DRAINS CONCRETE PAVEMENT OR OTHER CONCRETE



PLAN VIEW



SECTION A-A  
PAVEMENT TIES

PAVEMENT THICKNESS "T"	CLEAR DEPTH "D"	SAW CUT GROOVE "G"	MAXIMUM TIE BAR SPACING "S"	
			24' OR 26'	30'
6, 6 1/2"	3 3/4"	2"	48"	42"
7, 7 1/2"	3 1/4"	2 1/4"	45"	36"
8, 8 1/2"	3 3/4"	2 1/2"	39"	30"
9, 9 1/2"	4 1/4"	3"	33"	27"
10, 10 1/2"	4 3/4"	3 1/4"	30"	24"
11, 11 1/2"	5 1/4"	3 3/4"	27"	21"
12"	5 3/4"	4"	24"	21"

2004

CITY OF MADISON  
ENGINEERING DIVISION

LONGITUDINAL JOINTS  
AND PAVEMENT TIES  
DETAIL

STANDARD DETAIL DRAWING 3.10

**GENERAL NOTES**

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

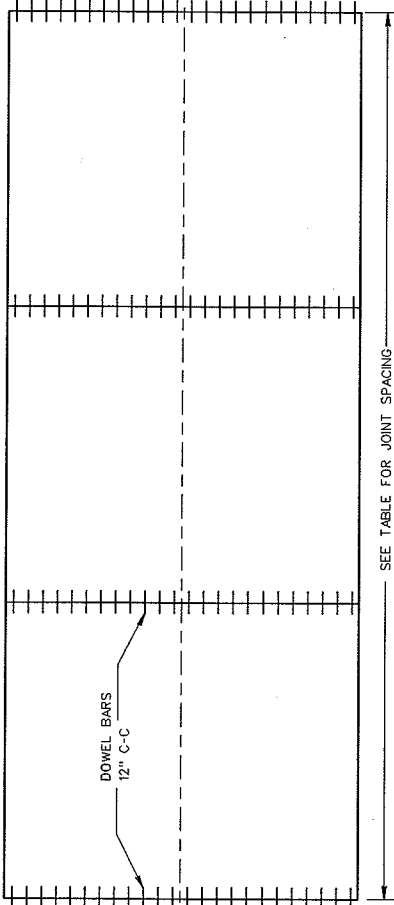
**CONTRACTION JOINTS**

- UNLESS OTHERWISE SPECIFIED, CONTRACTION JOINTS SHALL BE NORMAL TO THE CENTERLINE. THE LOCATION OF CONTRACTION JOINTS THRU INTERSECTIONS SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- CONTRACTION JOINTS SHALL NOT BE SEALED OR FILLED.
- DOWEL BARS SHALL BE INSTALLED PARALLEL TO THE PAVEMENT CENTERLINE AND SURFACE.

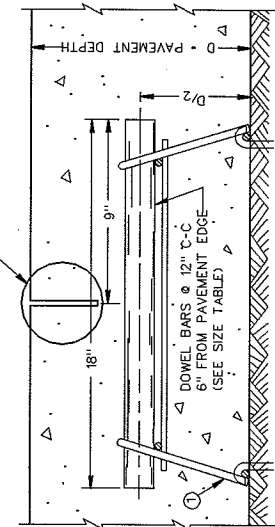
**CONSTRUCTION JOINTS**

CONSTRUCTION JOINTS SHALL BE A MINIMUM OF 4 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGNED EITHER PARALLEL TO CONTRACTION JOINTS OR AT 90° TO THE CENTERLINE. THE BARS MAY BE INSERTED THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

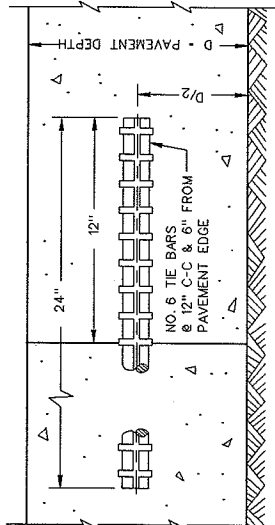
- ① ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY MAY BE USED WHEN APPROVED BY THE ENGINEER. MECHANICAL DOWEL BAR IMPLANTERS MAY BE USED INSTEAD OF DOWEL ASSEMBLIES.
- ② DOWEL BARS SHALL BE ANCHORED INTO DRILL HOLES WITH AN APPROVED EPOXY GROUT OF BOND BREAKING GREASE.
- ③ DOWEL BARS INSTALLED BY DRILLING SHALL BE SPACED 1'-3" ON CENTER. THE GROUPING OF DOWEL BARS SHALL BE CENTERED INSIDE THE SLAB BASED ON ALL THE FOLLOWING SITUATIONS:
  - BETWEEN THE EDGES OF PAVEMENTS WITHOUT LONGITUDINAL JOINTS OR BETWEEN THE EDGE OF PAVEMENT AND NEAREST LONGITUDINAL JOINT OR BETWEEN TWO ADJACENT LONGITUDINAL JOINTS.
  - ④ THE CLEAR DISTANCE FROM THE EDGE OF PAVEMENT OR LONGITUDINAL JOINT TO THE NEAR EDGE OF DOWEL BAR NEAREST THAT EDGE OR JOINT SHALL BE A MINIMUM OF 6 INCHES AND A MAXIMUM OF 14 INCHES.



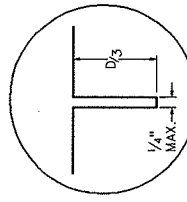
CONTRACTION JOINT LOCATIONS



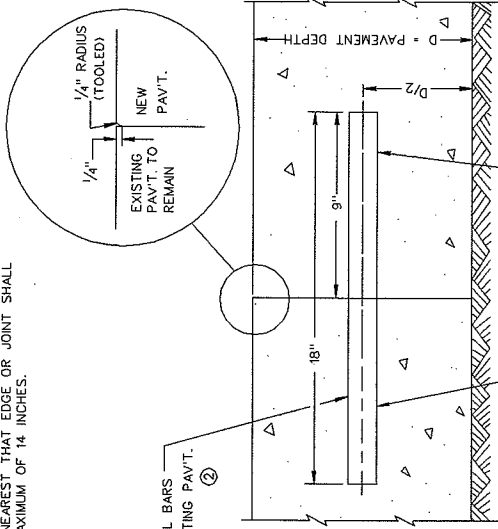
DOWELED CONTRACTION JOINT



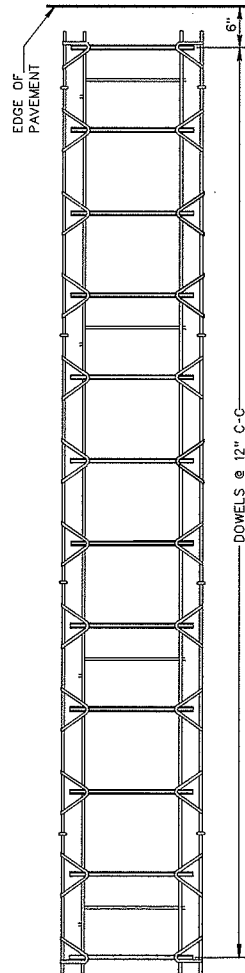
CONSTRUCTION JOINT



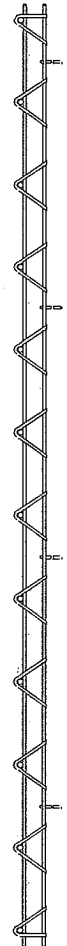
JOINT DETAIL



TRANSVERSE CONTRACTION JOINTS ABUTTING EXISTING PAVEMENT  
④ DOWEL BAR DETAIL



PLAN VIEW



SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
6", 6 1/2"	1 1/4"	12'
7", 7 1/2"	1 1/4"	14'
8", 8 1/2"	1 1/4"	15'
9", 9 1/2"	1 1/4"	15'
10" & ABOVE	1 1/2"	18'

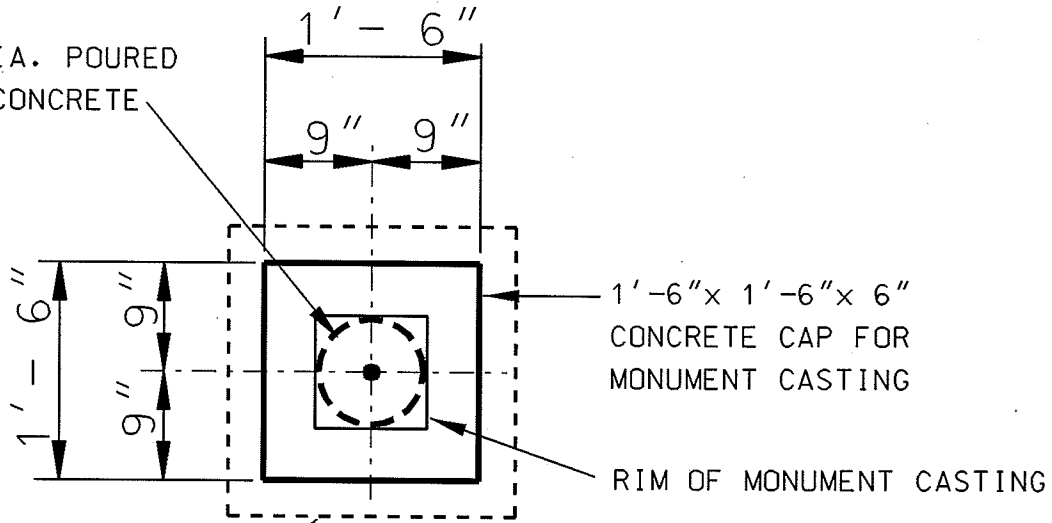
2004

CITY OF MADISON  
ENGINEERING DIVISION

**DOWELED CONCRETE PAVEMENT DETAIL**

STANDARD DETAIL DRAWING 3.11

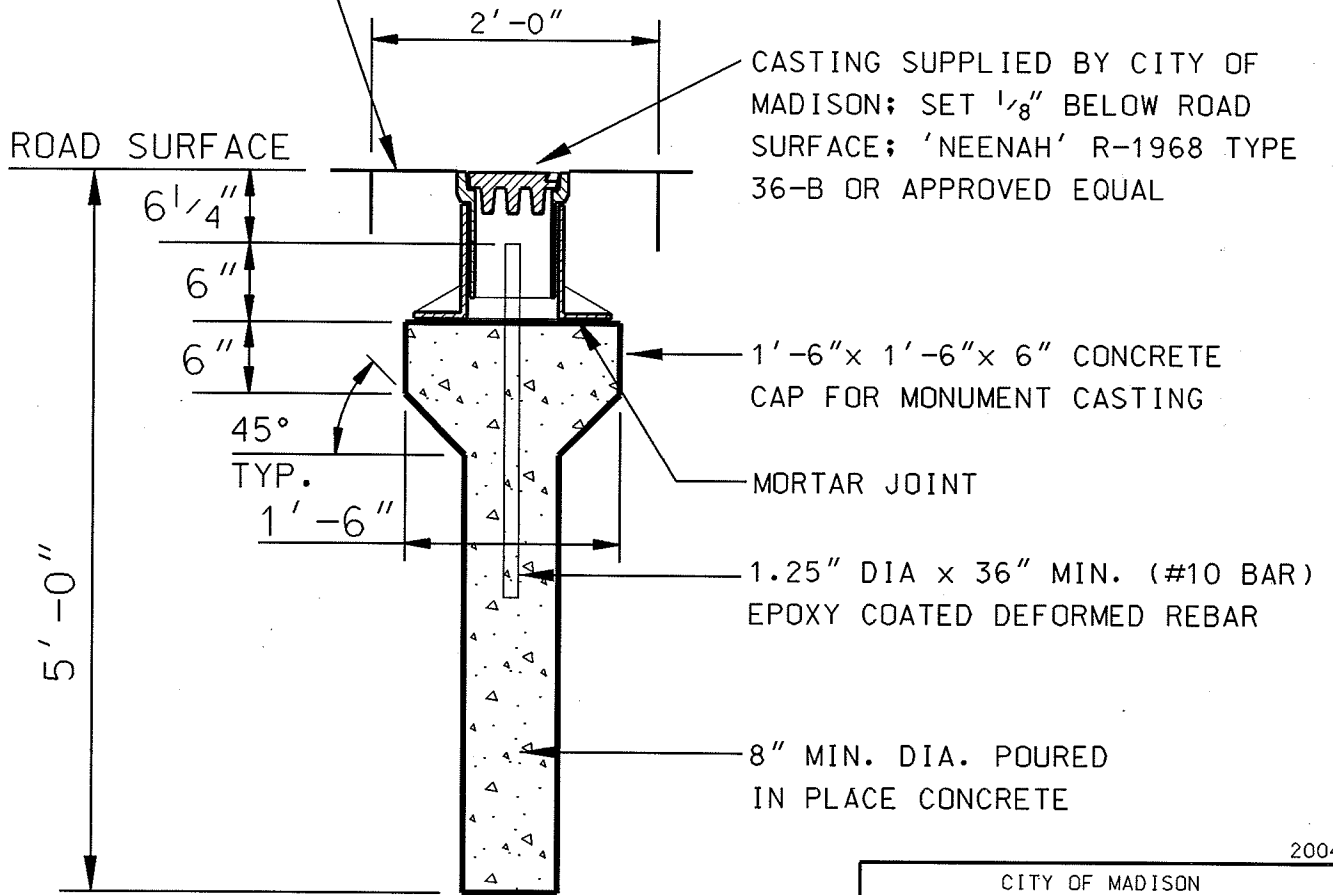
8" MIN. DIA. POURED  
IN PLACE CONCRETE



2' x 2' MIN. PAVEMENT  
PATCH AROUND NEW  
MONUMENT CASTINGS

PLAN VIEW

NOTE: DETAILS FOR SECTION  
CORNER MONUMENTS NOT IN  
STREET SIMILAR, SHALL NOT  
HAVE PAVEMENT PATCH

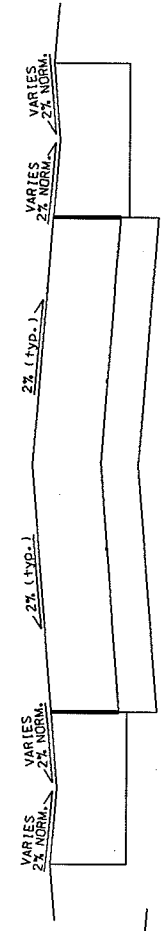


SECTION VIEW

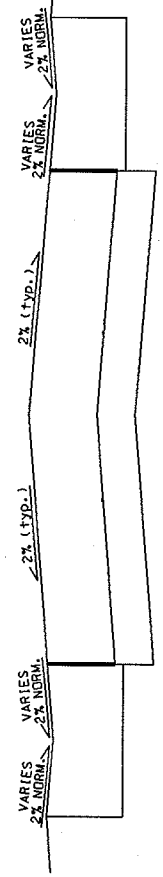
2004

CITY OF MADISON ENGINEERING DIVISION
<b>MADISON STANDARD SECTION CORNER MONUMENT</b>
STANDARD DETAIL DRAWING 3.12

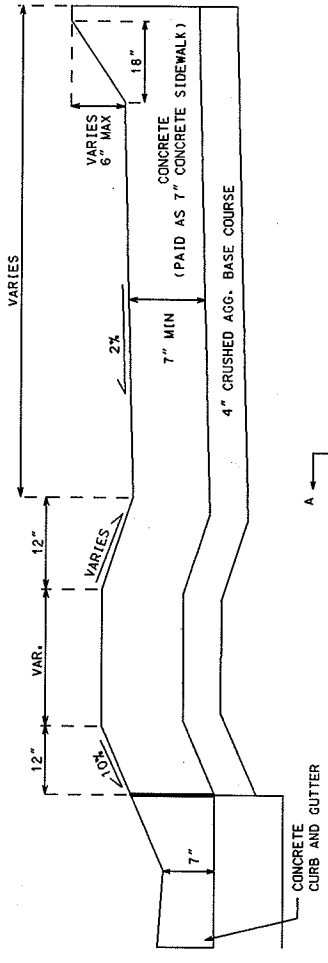
SECTION B-B



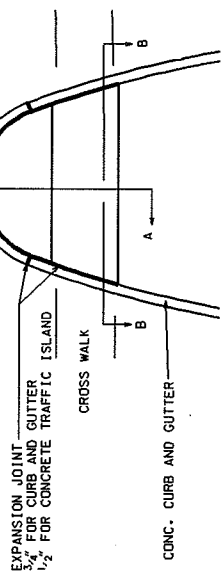
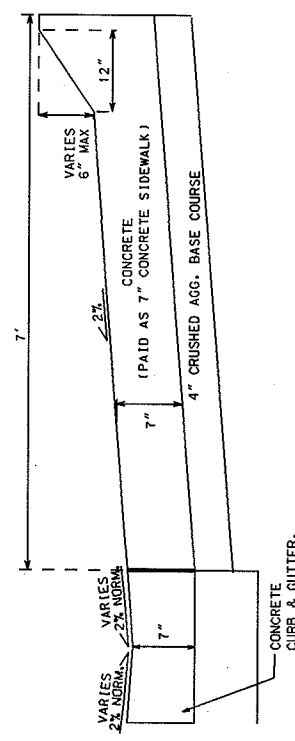
SECTION B-B



SECTION A-A



SECTION A-A



DETAIL  
CONCRETE TRAFFIC ISLAND  
CROSS WALK 2' OR FARTHER FROM  
END OF ISLAND NOSE

2004

DETAIL  
CONCRETE TRAFFIC ISLAND  
CROSS WALK AT END  
OF ISLAND NOSE

CITY OF MADISON  
ENGINEERING DIVISION

MOUNTABLE MEDIAN  
ISLAND NOSE DETAIL

STANDARD DETAIL DRAWING 3.13