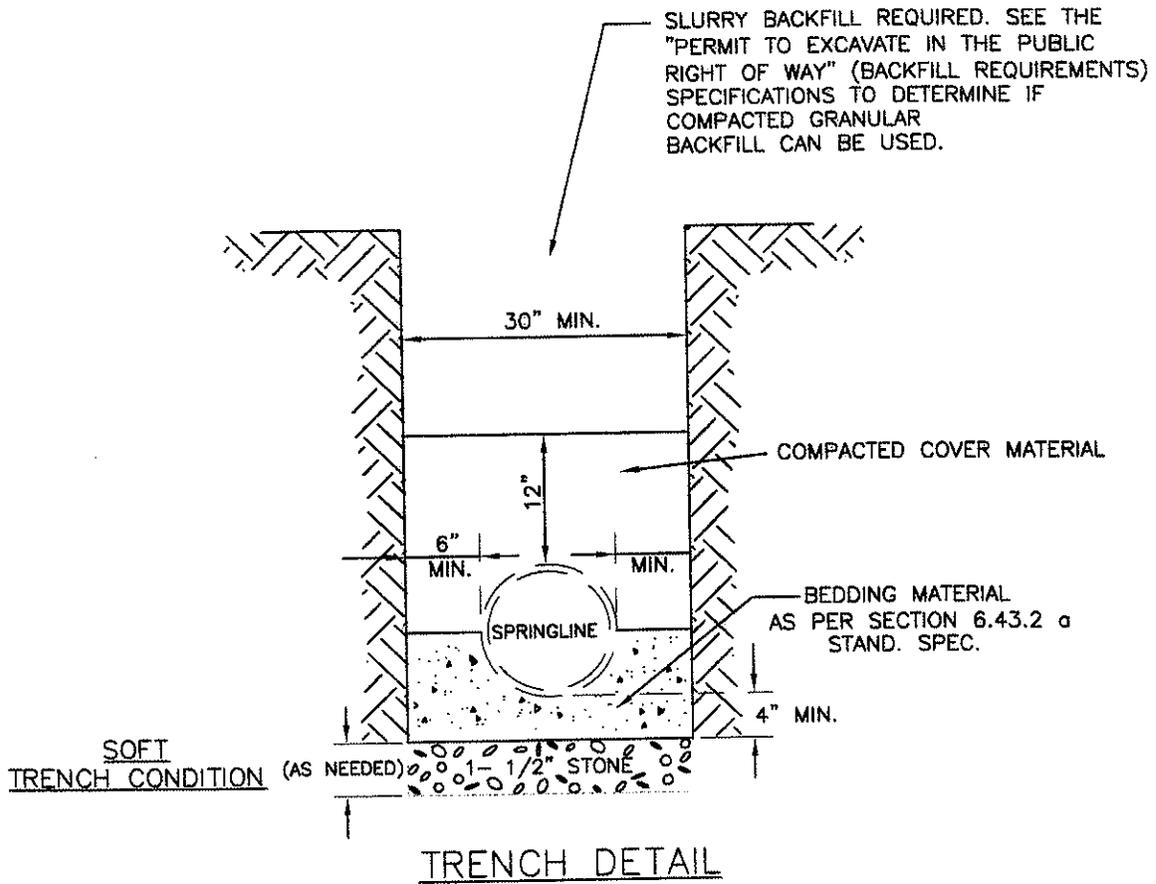


SECTION STORM SEWER DETAILS

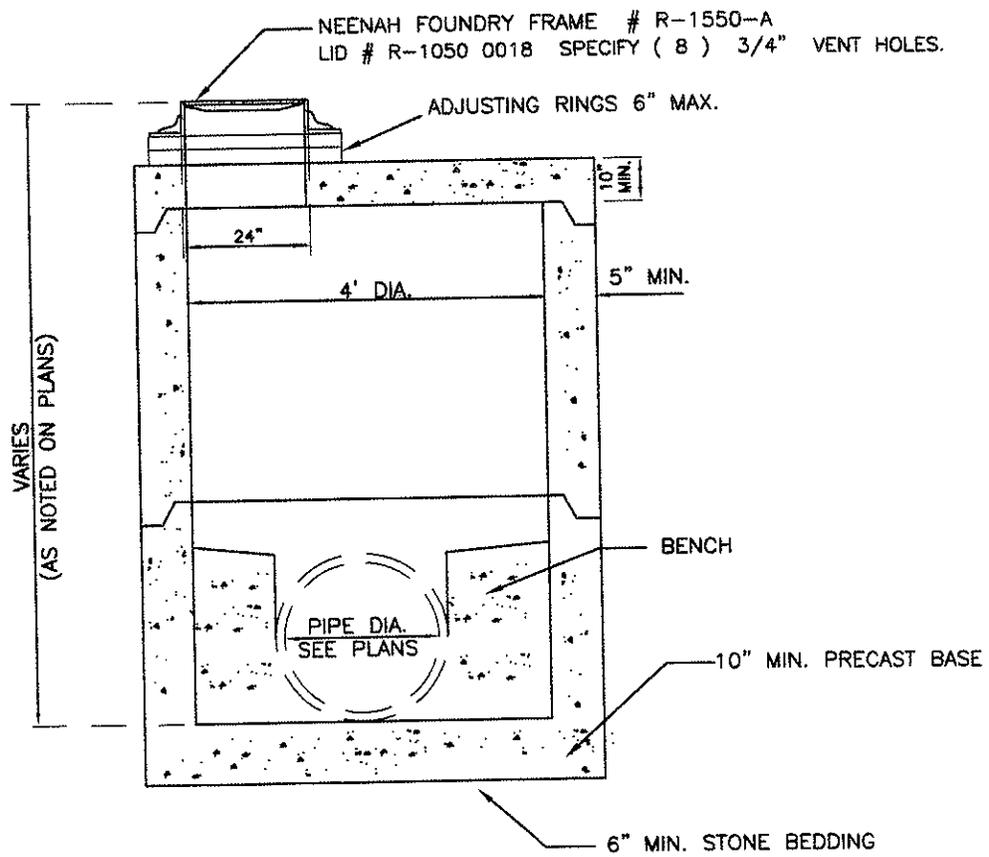


City of
Sheboygan
spirit on the lake

SECTION STORM SEWER DETAILS

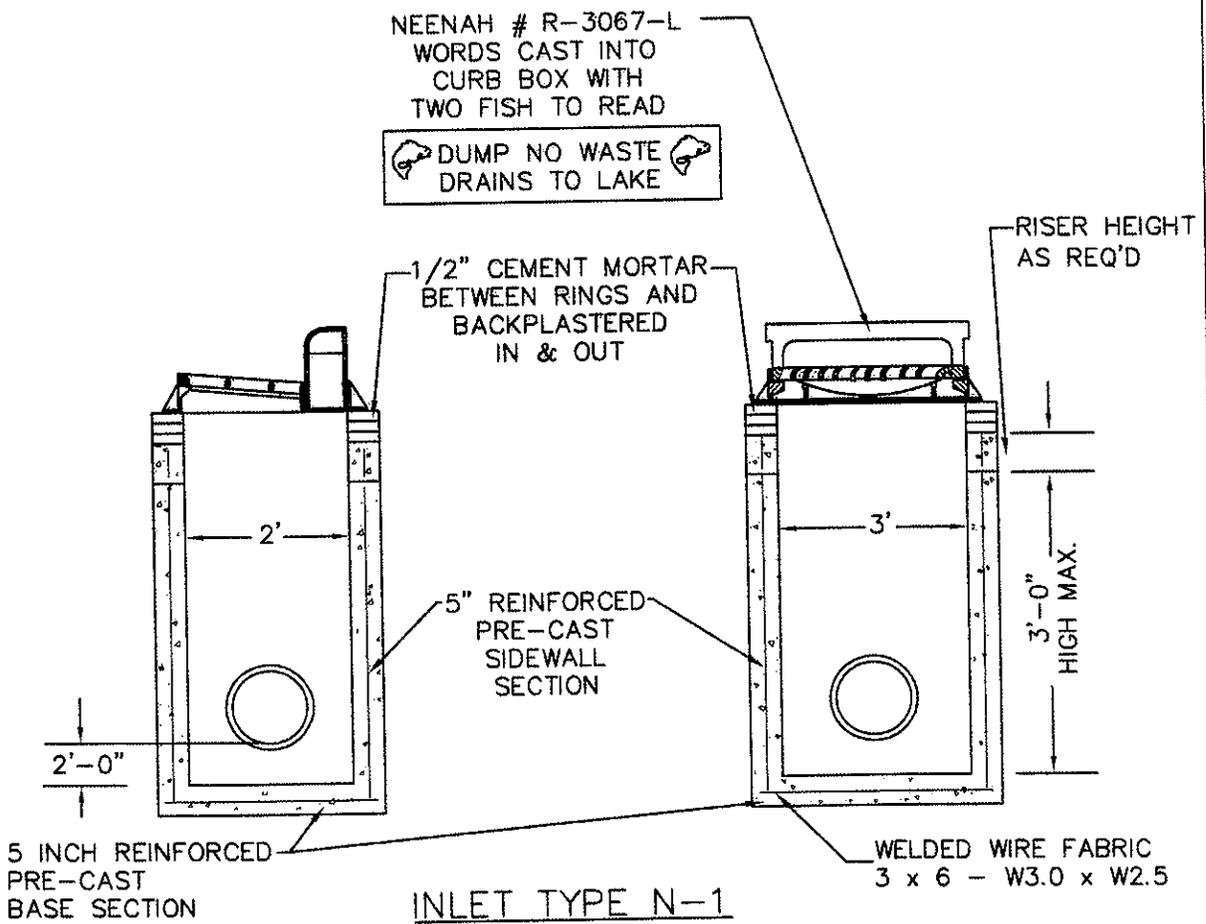


SECTION STORM SEWER DETAILS



4' DIAMETER PRECAST STORM MANHOLE
NTS

SECTION STORM SEWER DETAILS



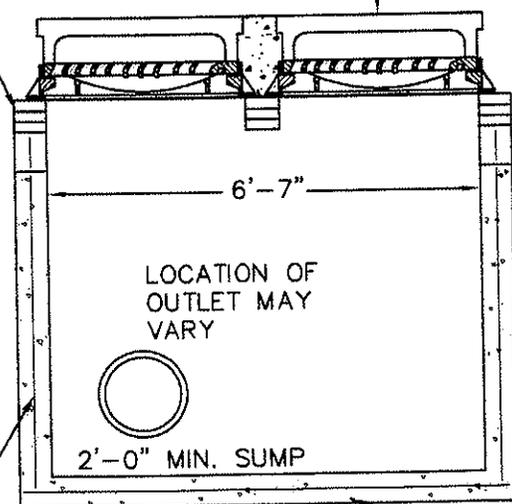
SECTION STORM SEWER DETAILS

NEENAH # R-3067-L
WORDS CAST INTO
CURB BOX WITH
TWO FISH TO READ

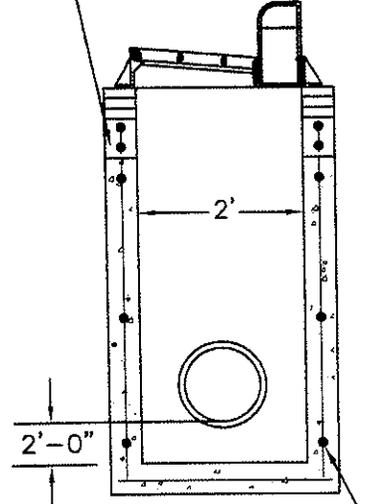
DUMP NO WASTE
DRAINS TO LAKE

1/2" CEMENT MORTAR
BETWEEN RINGS AND
BACKPLASTERED
IN & OUT

RISER HEIGHT
AS REQ'D



3'-0"
HIGH MAX.



WELDED WIRE FABRIC
3 x 6 - W3.0 x W2.5

6" REINFORCED
PRE-CAST SECTION

#4 REBAR
AS SHOWN

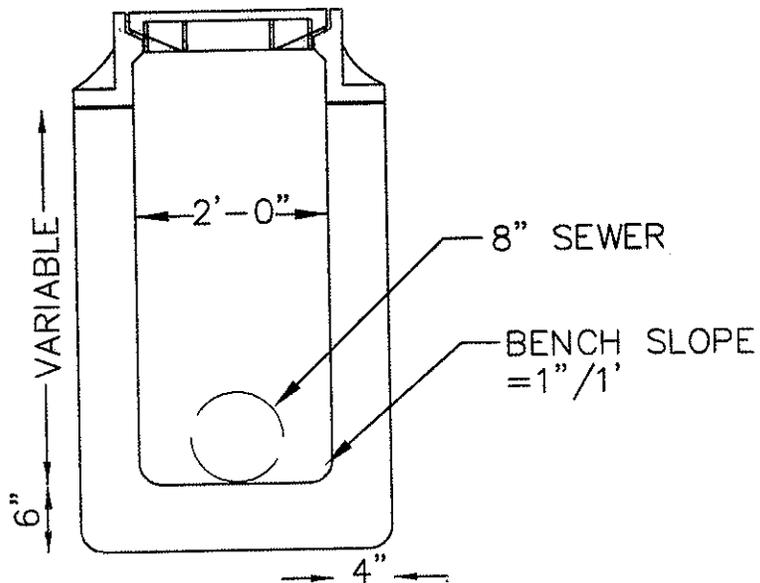
INLET TYPE N-2



SECTION STORM SEWER DETAILS

CLEANOUT / YARD DRAIN MH.

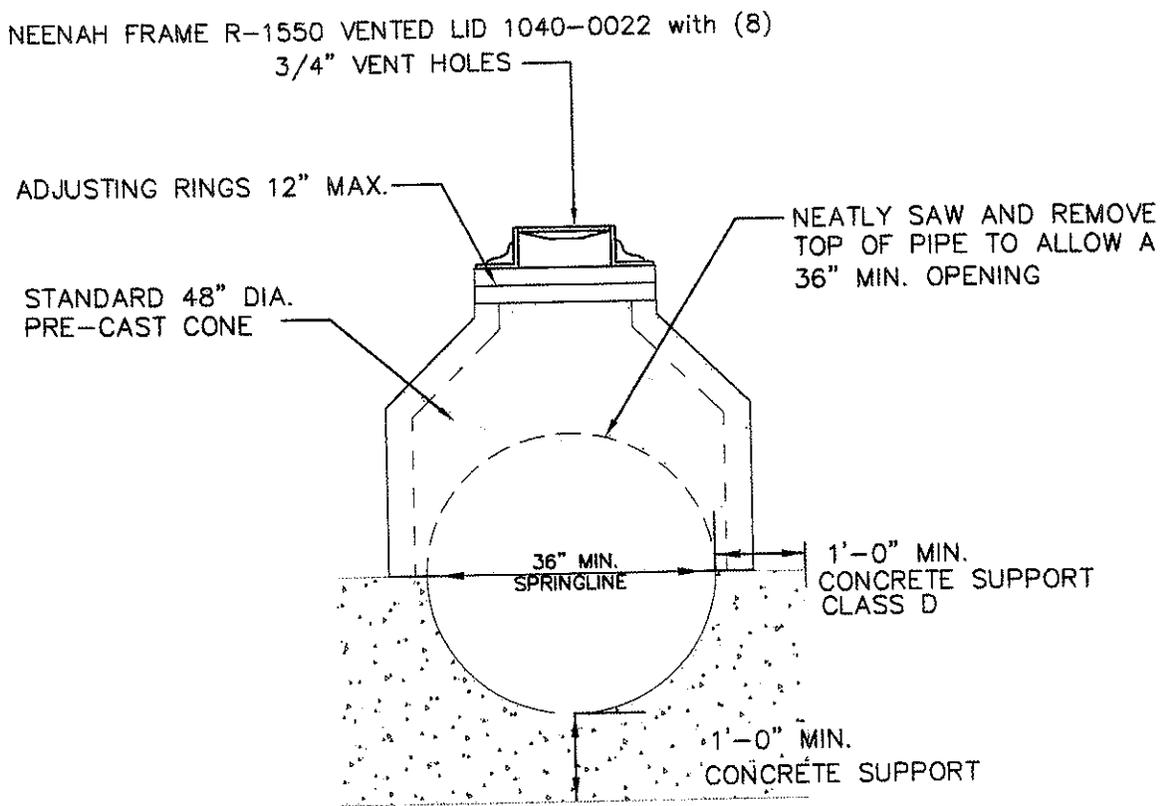
NEENAH FRAME R-1550 LID R-2050 TYPE C / YARD DRAIN
NEENAH FRAME R-1550 VENTED LID 1040-0022 with (6)
3/4" VENT HOLES (CLEAN-OUT MH.)



STANDARD MINI-STORM MH. DETAIL

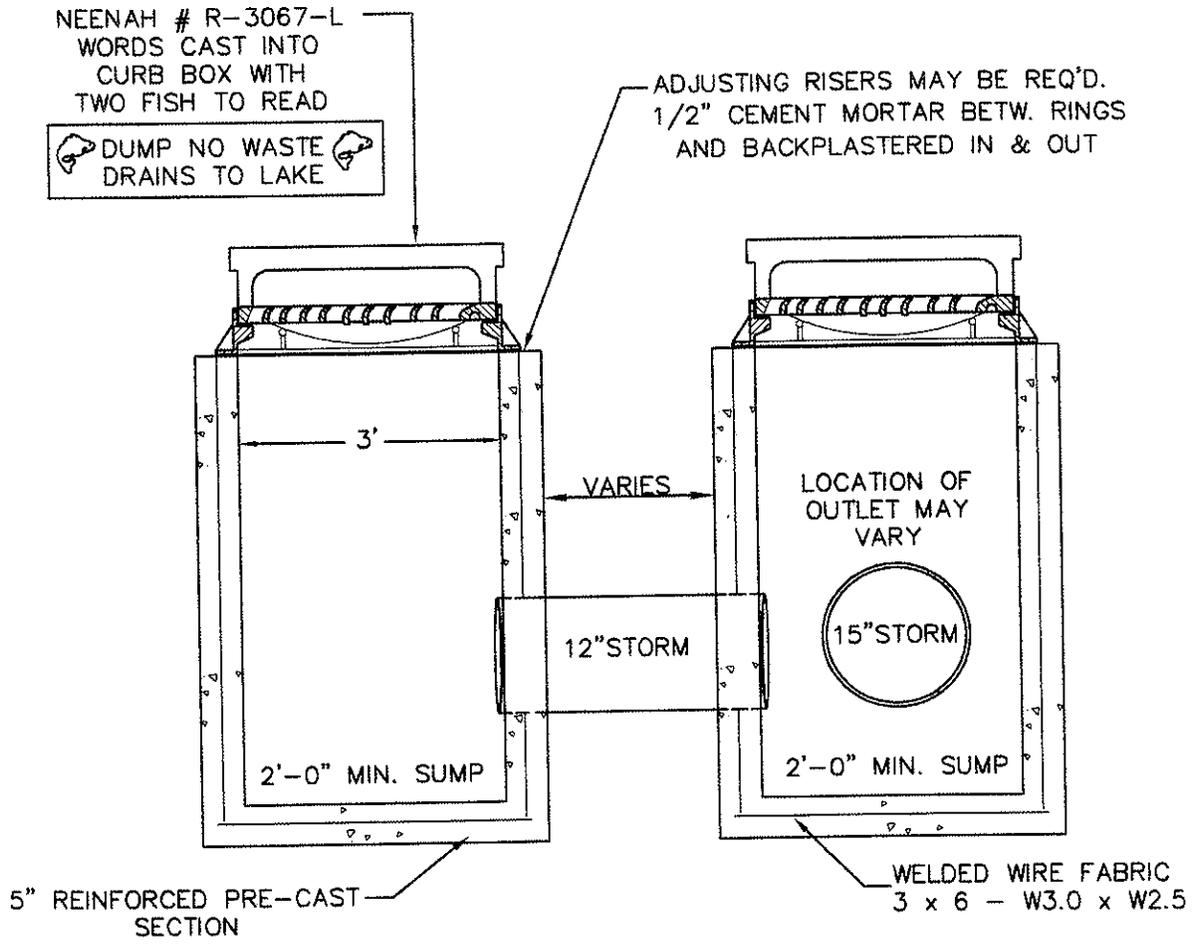
N.T.S.

SECTION STORM SEWER DETAILS



CONCRETE SUPPORT FOR NEW MH. ON LARGER SEWERS

SECTION STORM SEWER DETAILS



STANDARD INLET TYPE N-1 (2)
INSTALLATION



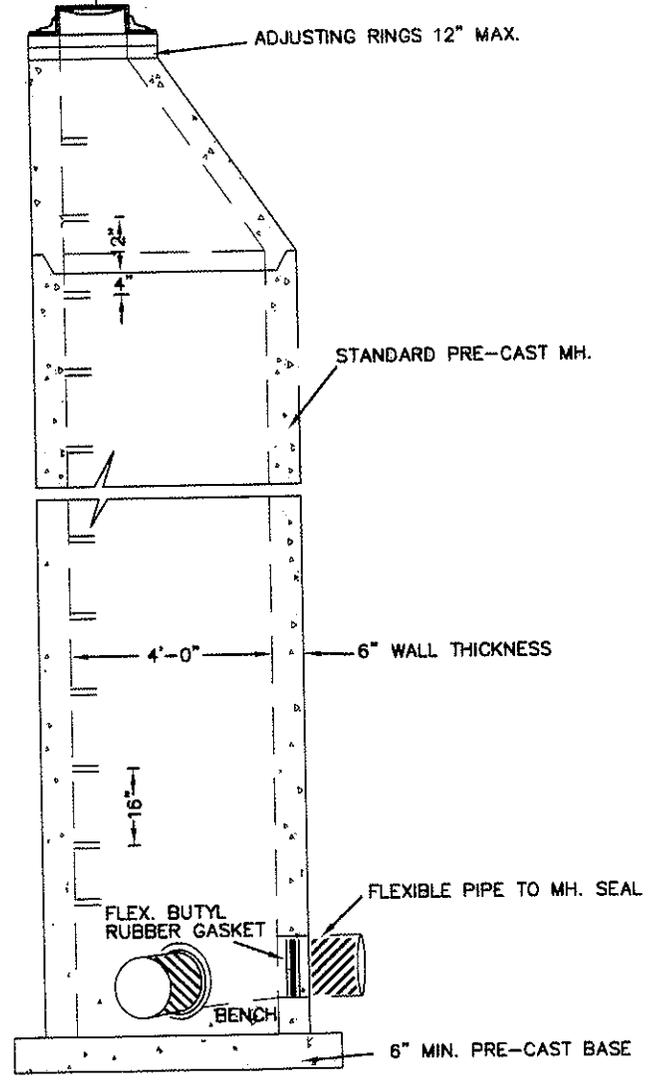
SECTION SANITARY SEWER DETAILS



City of
Sheboygan
spirit on the lake

SECTION SANITARY SEWER DETAILS

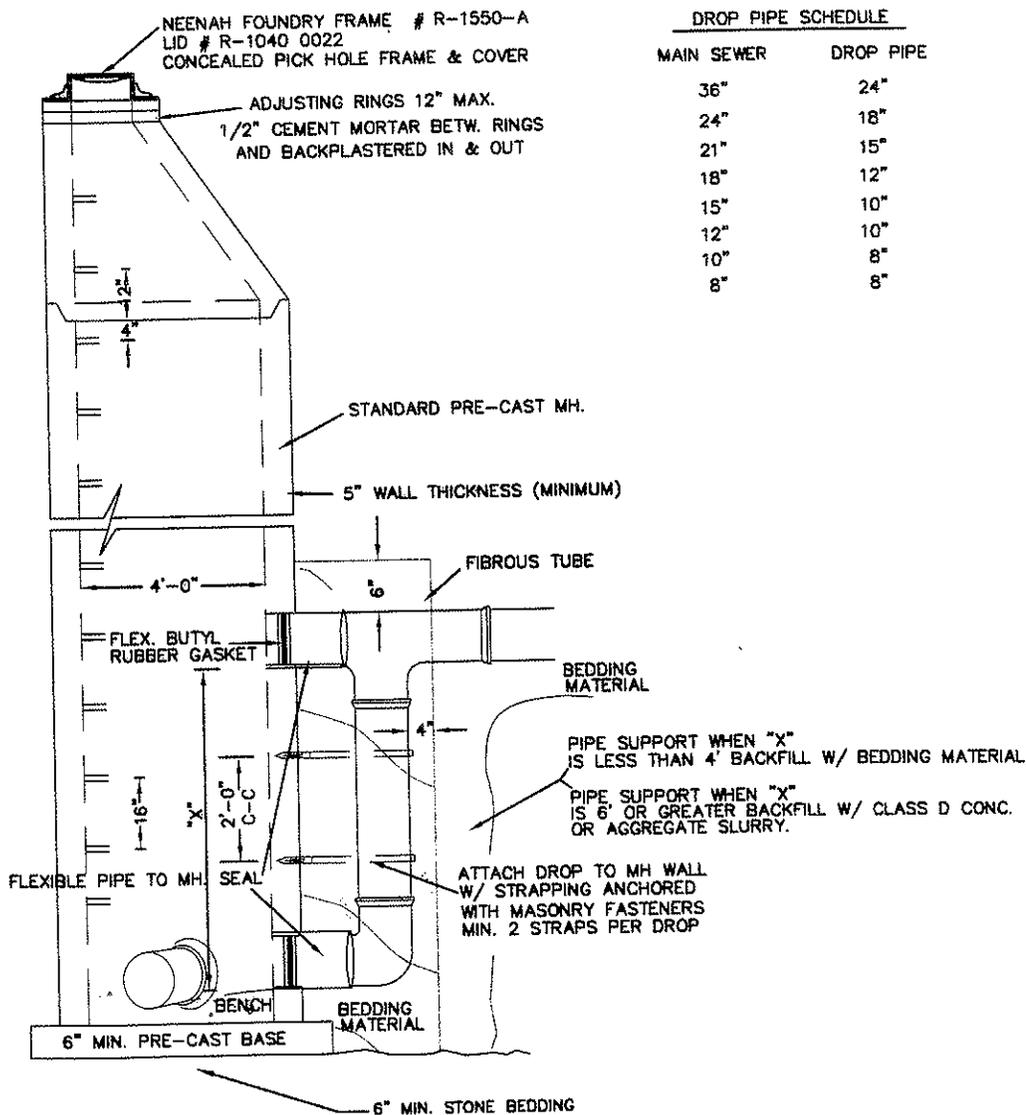
NEENAH FOUNDRY FRAME # R-1550-A
LID # R-1040 0022
CONCEALED PICK HOLE
FRAME & COVER



STANDARD SANITARY SEWER MANHOLE
WITH ECCENTRIC CONE



SECTION SANITARY SEWER DETAILS



DROP PIPE SCHEDULE	
MAIN SEWER	DROP PIPE
36"	24"
24"	18"
21"	15"
18"	12"
15"	10"
12"	10"
10"	8"
8"	8"

STANDARD SANITARY SEWER—NEW OUTSIDE DROP MANHOLE
WITH ECCENTRIC CONE

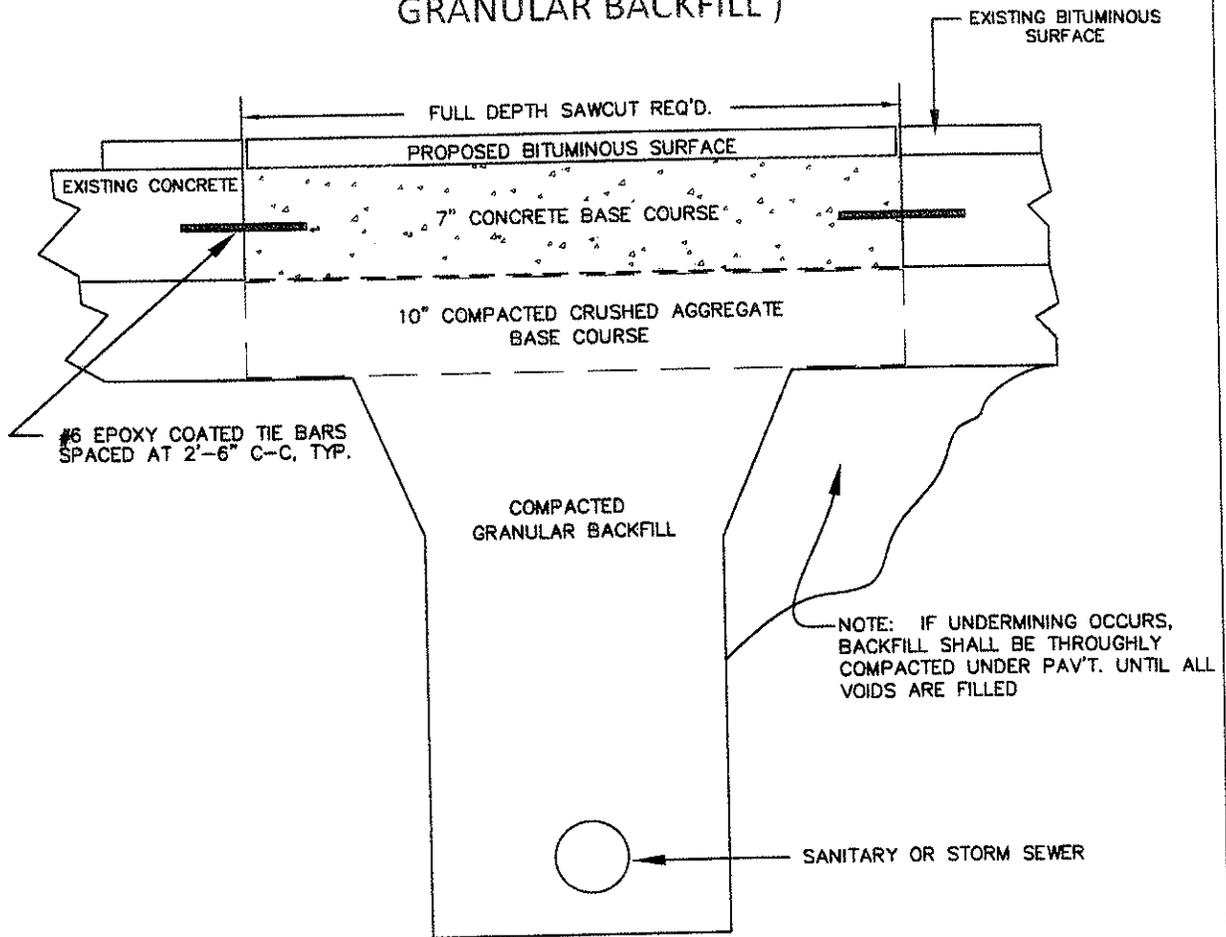
SECTION PAVING DETAILS



City of
Sheboygan
spirit on the lake

SECTION PAVEMENT DETAILS

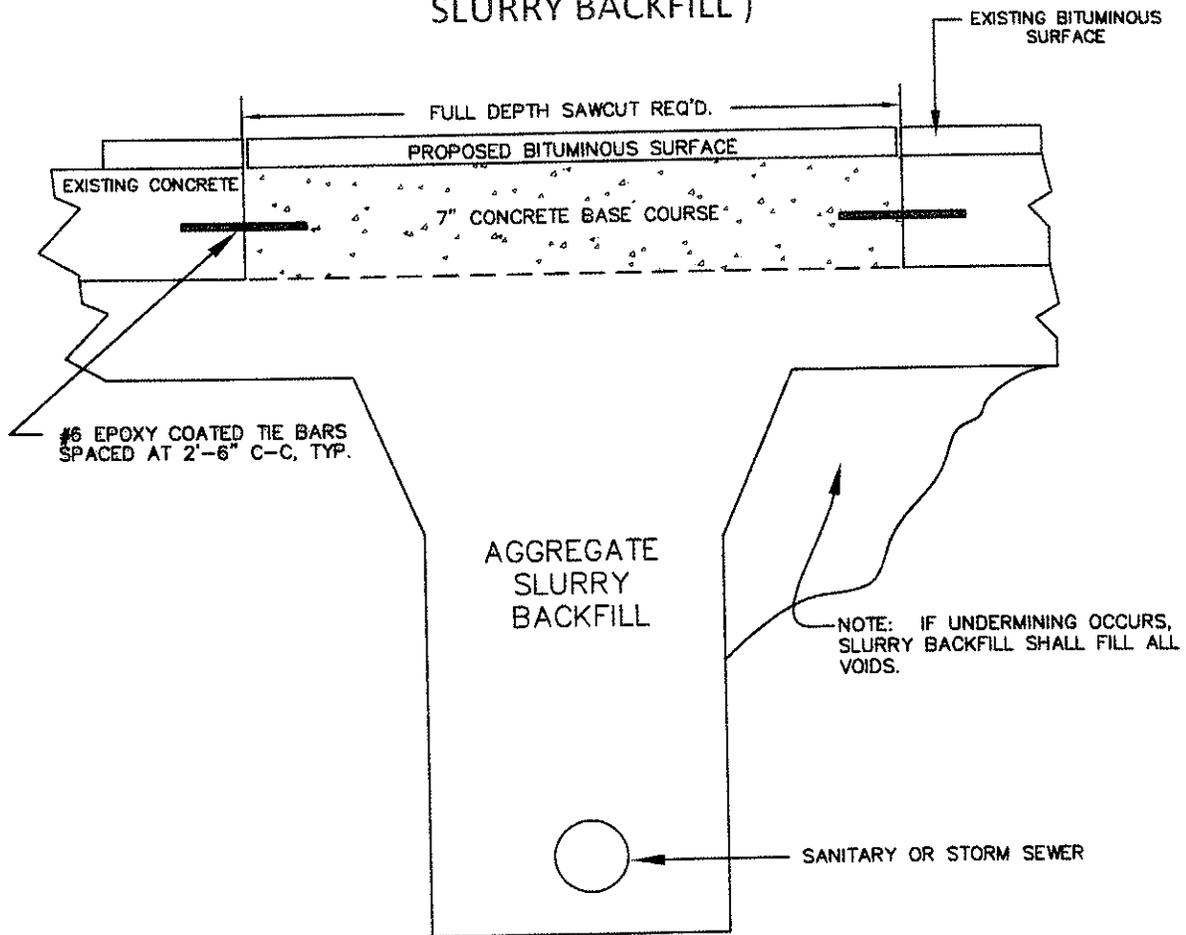
(WITH COMPACTED
GRANULAR BACKFILL)



TYPICAL CUT PAVEMENT SECTION
UTILITY PATCH DETAIL

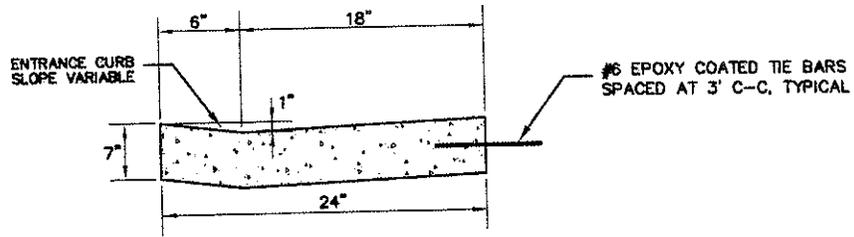
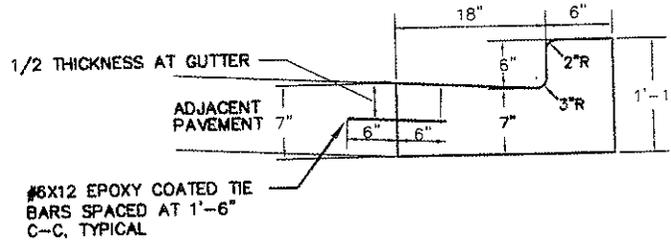
SECTION PAVEMENT DETAILS

(WITH AGGREGATE
SLURRY BACKFILL)

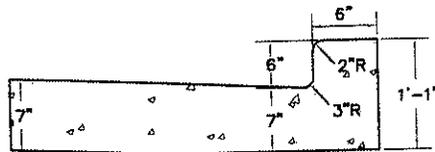


TYPICAL CUT PAVEMENT SECTION
UTILITY PATCH DETAIL

SECTION PAVEMENT DETAILS

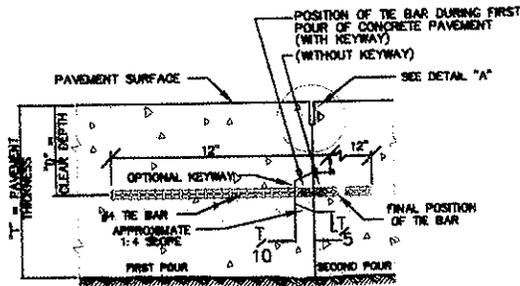


CONCRETE CURB AND GUTTER 24-INCH
FOR REPLACEMENT ADJ. TO EXIST. 6" OR 8" CURB HEAD
& CONCRETE DRIVEWAY ADJ. TO 6" OR 8" CURB HEAD

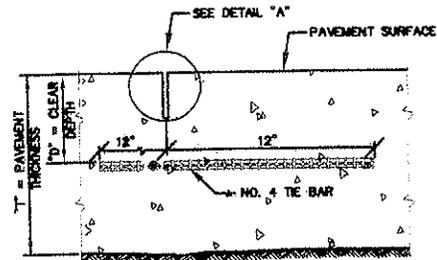


CONCRETE CURB AND GUTTER INTEGRAL, TYPE A
6" OR 8" CURB HEAD

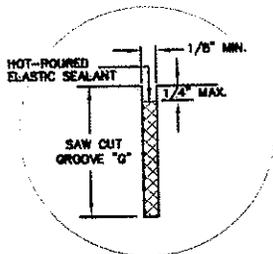
SECTION PAVEMENT DETAILS



CONSTRUCTION JOINT



SAWED JOINT



DETAIL "A"

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

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

CONTRACTION JOINTS

THE LOCATION AND ORIENTATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

CONTRACTION JOINTS SHALL BE SEALED AS SHOWN IN DETAIL "A"

DOWEL BARS SHALL BE PARALLEL TO THE PAVEMENT CENTERLINE AND SURFACE

CONSTRUCTION JOINTS

CONSTRUCTION JOINTS SHALL BE LOCATED A MINIMUM OF 4 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGNED EITHER PARALLEL TO THE CONTRACTION JOINTS OR AT 90° TO THE CENTERLINE.

CONSTRUCTION JOINTS SHALL BE SEALED AS SHOWN IN DETAIL "A"

TIE BARS MAY BE INSERTED THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

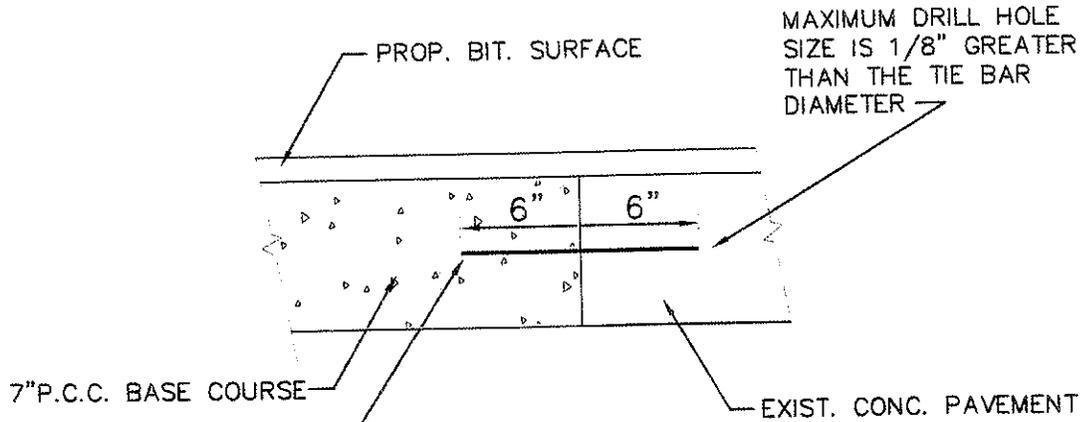
TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.

REFER TO TYPICAL CROSS SECTIONS FOR PAVED WIDTH AND LOCATION OF LONGITUDINAL JOINTS.

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

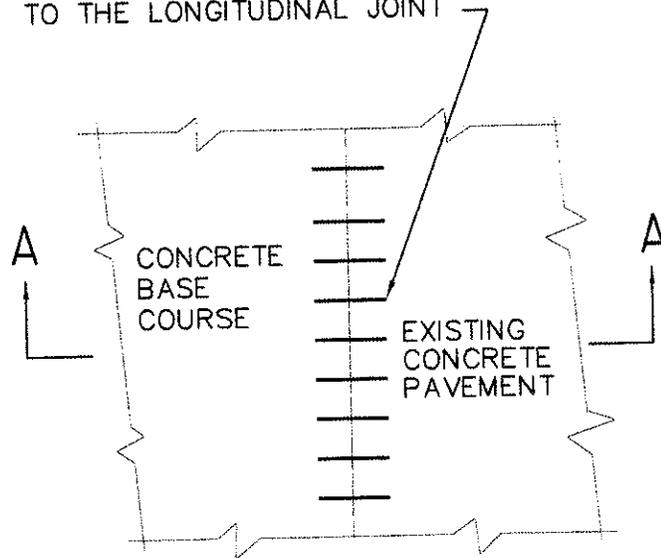


SECTION PAVEMENT DETAILS

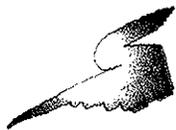


SECTION A-A PAVEMENT TIES

NO. 6 X 12" EPOXY COATED TIE BARS
SPACED 2'-6" C-C, INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT



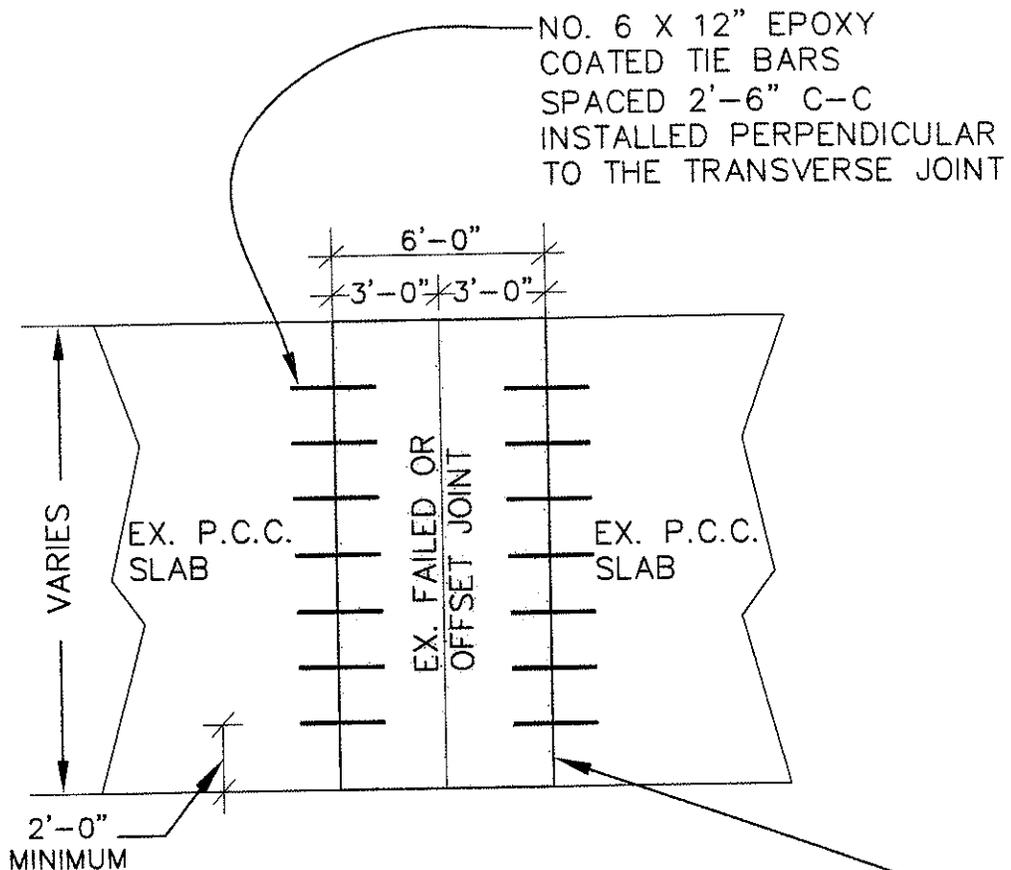
PLAN VIEW



City of
Sheboygan
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REVISED JAN.22, 2014
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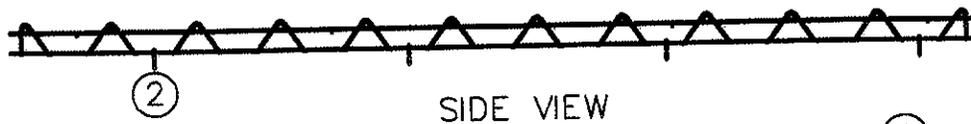
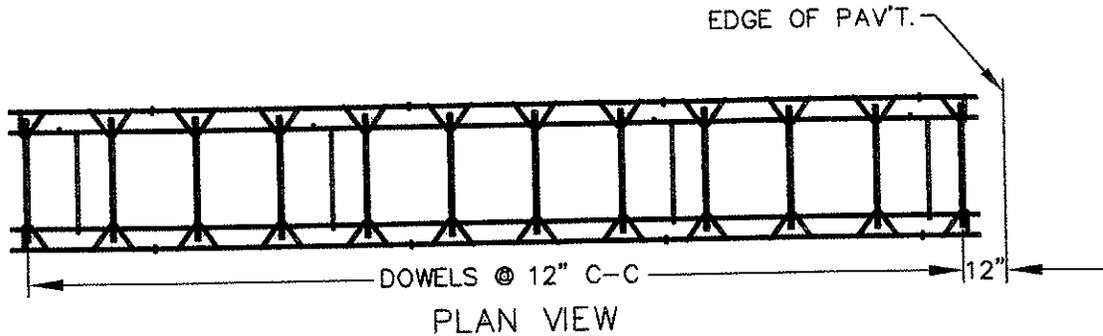
SECTION PAVEMENT DETAILS



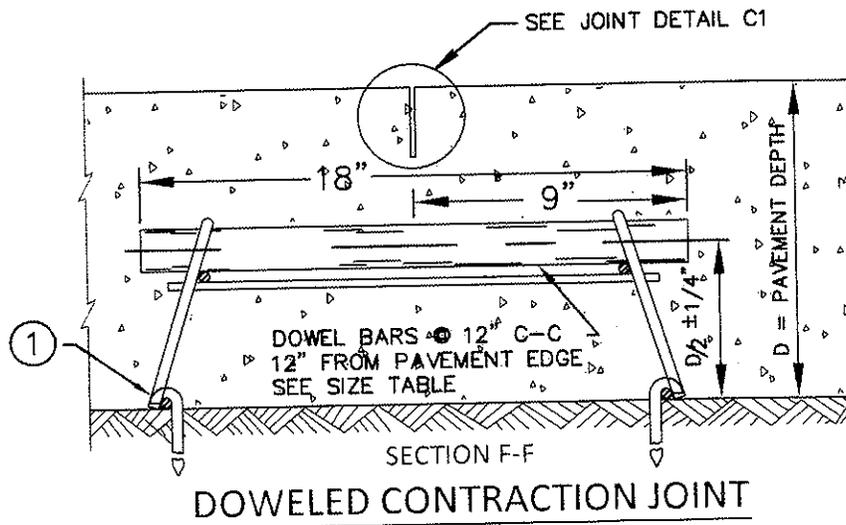
FULL DEPTH SAW 3.0' OFF FAILED JOINT BOTH DIRECTIONS AND REPLACE WITH 7" P.C.C. OR MATCH EXISTING PAVEMENT DEPTH IF THE PAVEMENT DEPTH IS GREATER THAN 7".

TYPICAL FOR TRANSVERSE JOINT REPAIR

SECTION PAVEMENT DETAILS (URBAN DOWELED CONCRETE PAVEMENT)

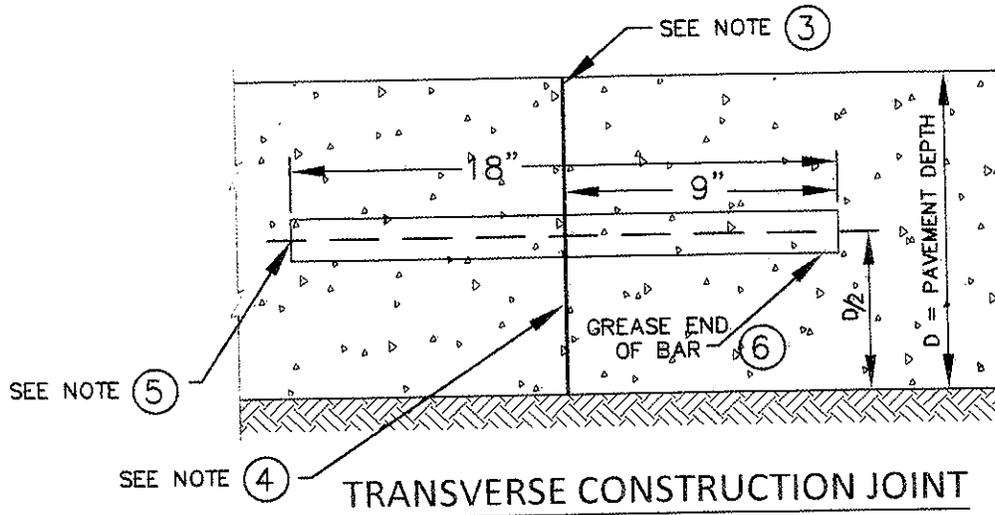


CONTRACTION JOINT DOWEL ASSEMBLY ①



GENERAL NOTES PAGE 8

SECTION PAVEMENT DETAILS (URBAN DOWELED CONCRETE PAVEMENT)



GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

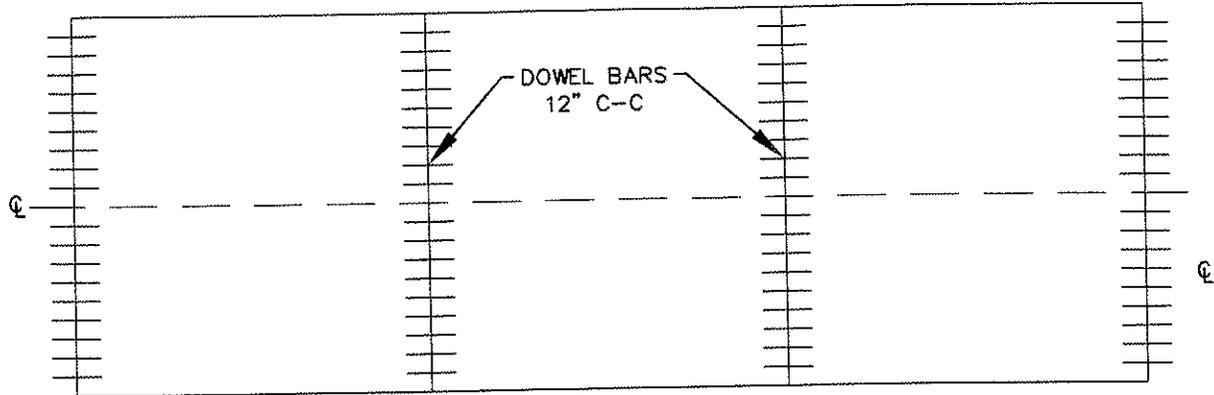
FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTERMOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

- ① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.
- ② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.
- ③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.
- ④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.
- ⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO DRILLED DOWEL BAR CONSTRUCTION JOINT DETAIL.
- ⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.
- ⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.

SECTION PAVEMENT DETAILS (URBAN DOWELED CONCRETE PAVEMENT)

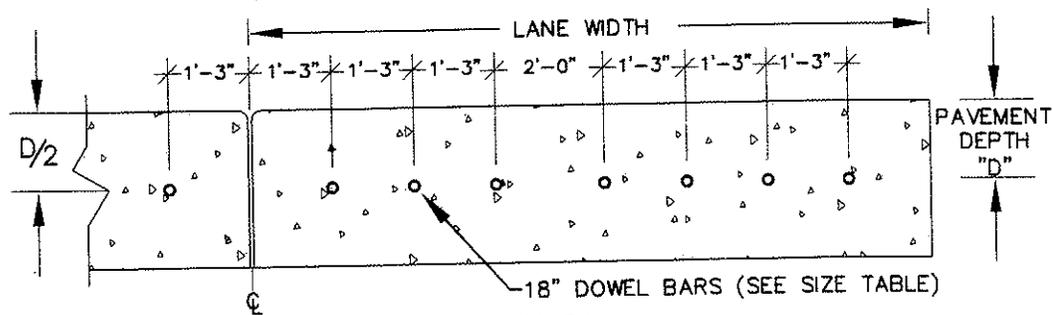


CONSTRUCTION JOINT LOCATIONS

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	12'
7", 7 1/2"	1"	14'
8", 8 1/2"	1-1/4"	15'
9", 9 1/2"	1-1/4"	15'
10 & ABOVE	1-1/2"	15'

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

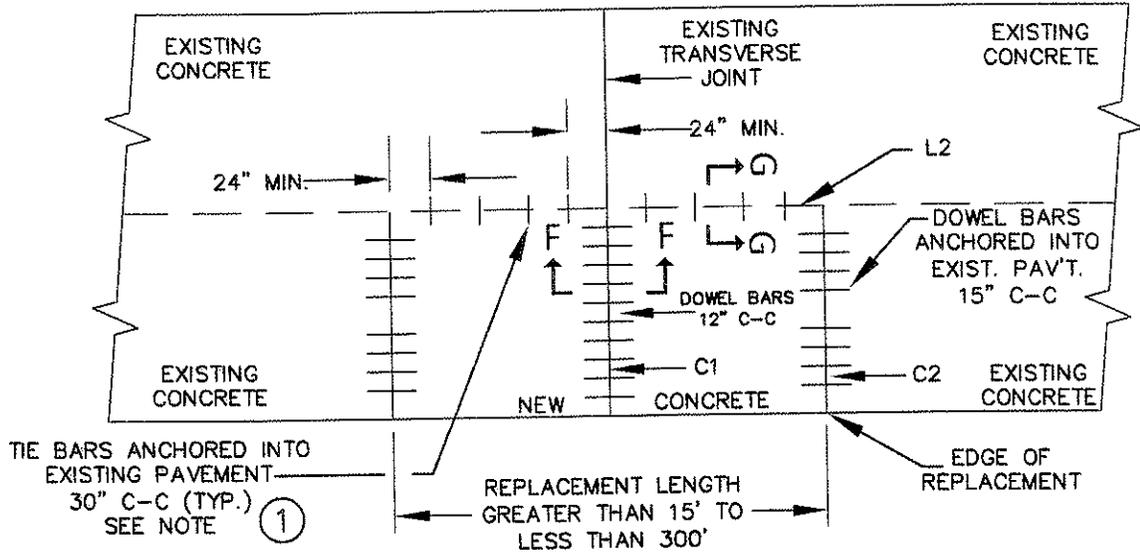
(FOR 11' LANE WIDTH REDUCE CENTER SPACE TO 1'-0")



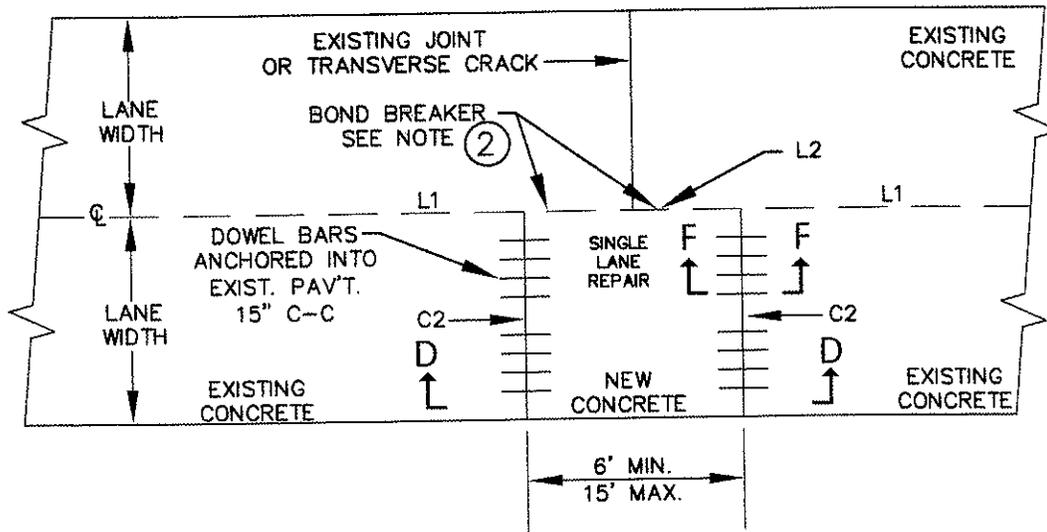
SECTION E-E DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



SECTION PAVEMENT DETAILS (DOWELED CONCRETE PAVEMENT REPAIR & REPLACEMENT)



SINGLE LANE CONCRETE PAVEMENT REPLACEMENT PLAN VIEW



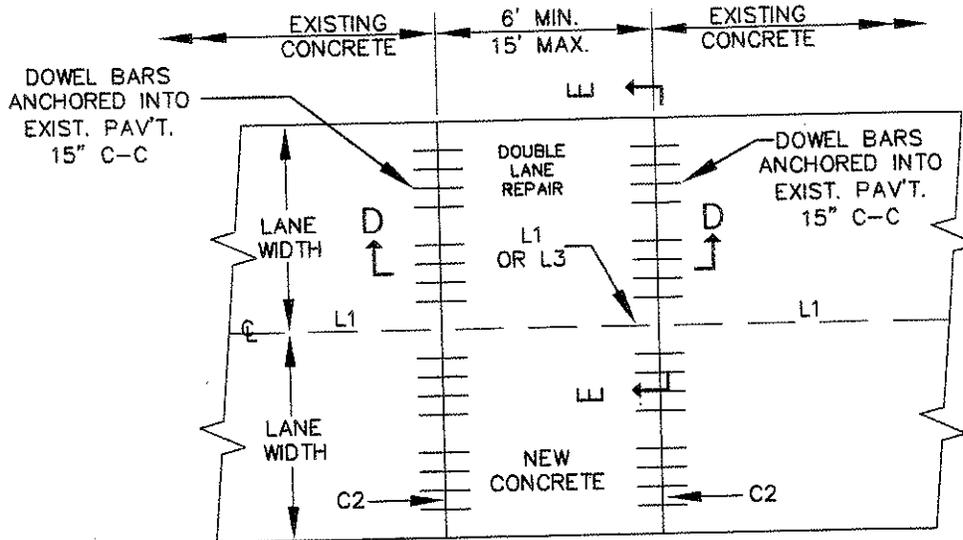
SINGLE LANE CONCRETE PAVEMENT REPAIR PLAN VIEW

① WITH THE ENGINEER'S APPROVAL, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES AND TO SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

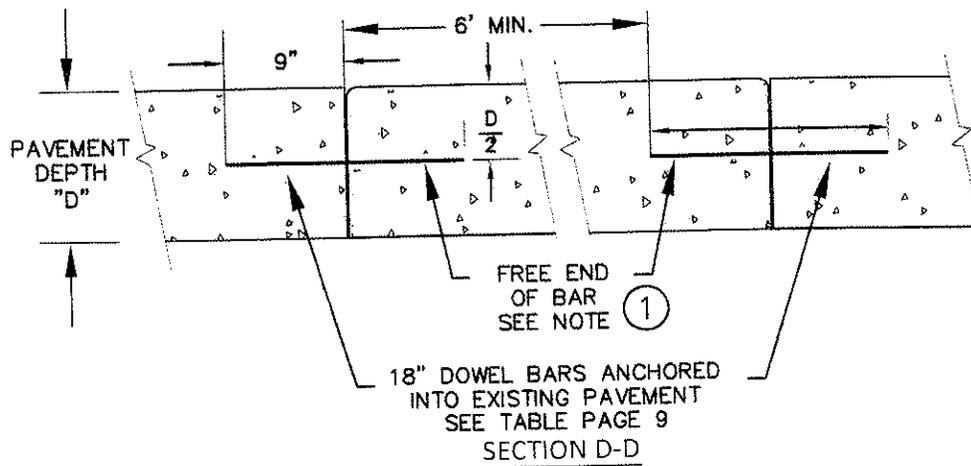
② USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.



SECTION PAVEMENT DETAILS (DOWELED CONCRETE PAVEMENT REPAIR & REPLACEMENT)



MULTI-LANE CONCRETE PAVEMENT REPAIR

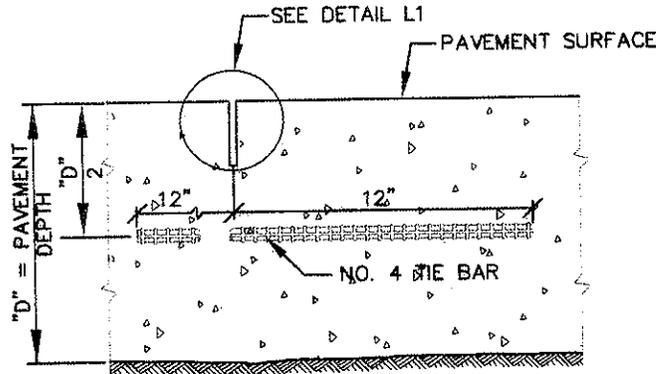


INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE. CONCRETE PAVEMENT REPAIRS OF EXISTING NON-DOWELED CONCRETE PAVEMENTS NEED NOT BE DOWELED. ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

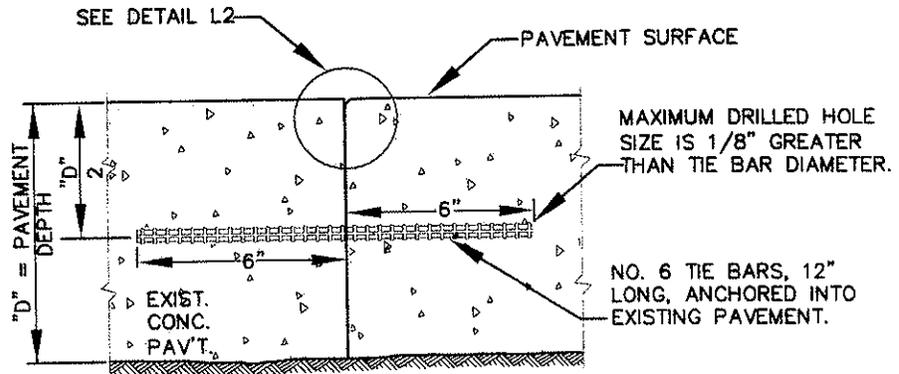
FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

- ① APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

SECTION PAVEMENT DETAILS (CONCRETE PAVEMENT REPAIR & REPLACEMENT)

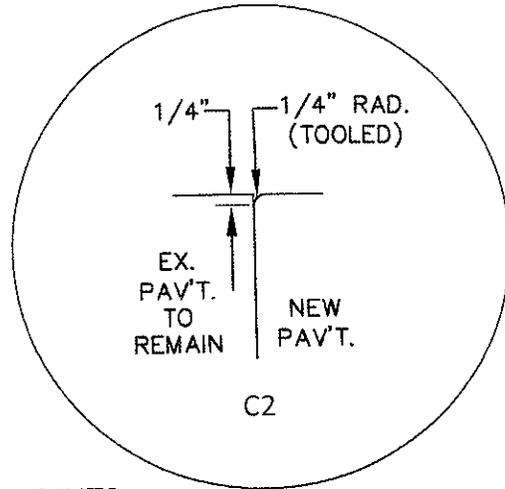
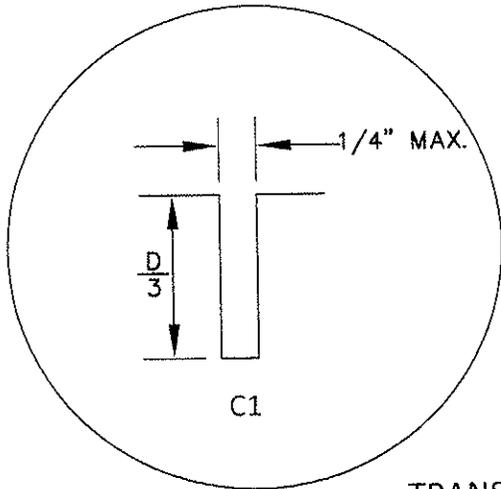


SECTION C-C
SAWED LONGITUDINAL JOINT

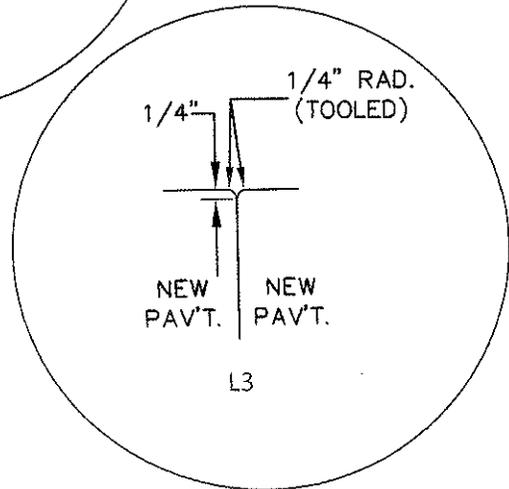
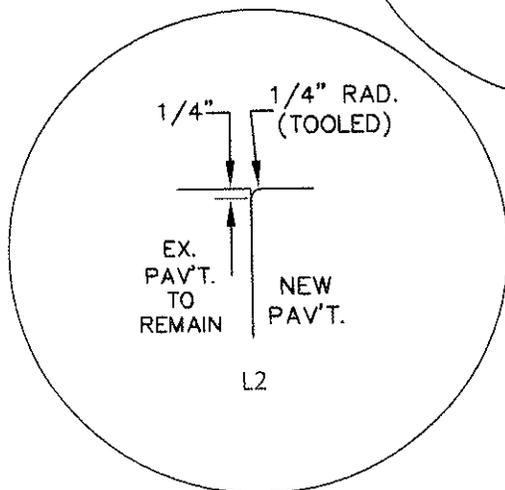
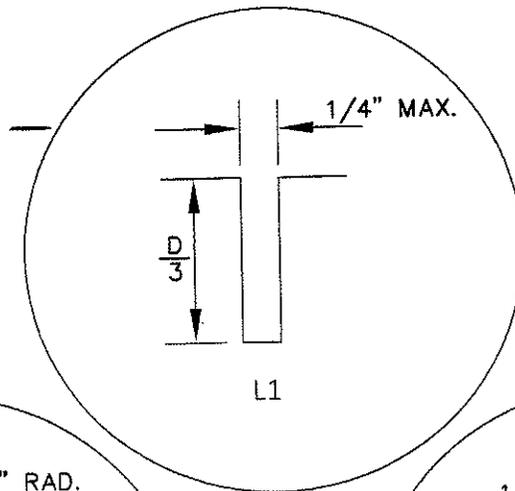


SECTION G-G
TIE BARS ANCHORED
INTO EXISTING PAVEMENT

SECTION PAVEMENT DETAILS (CONCRETE PAVEMENT REPAIR & REPLACEMENT)

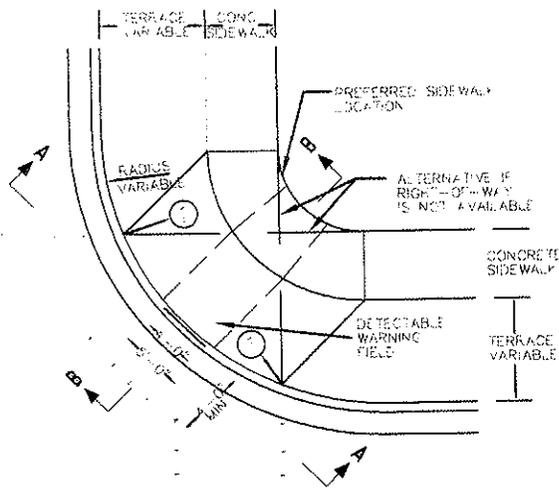


TRANSVERSE JOINTS

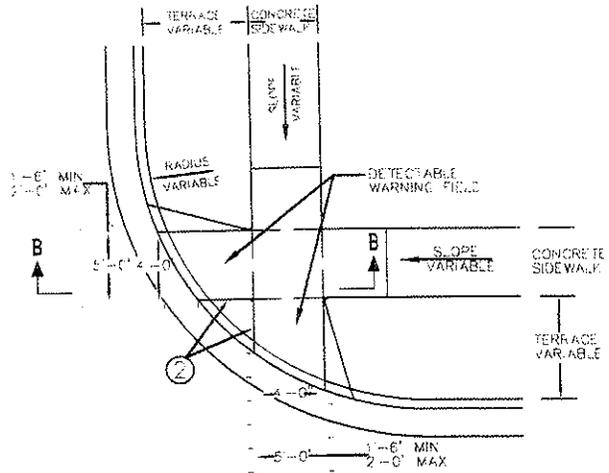


LONGITUDINAL JOINTS

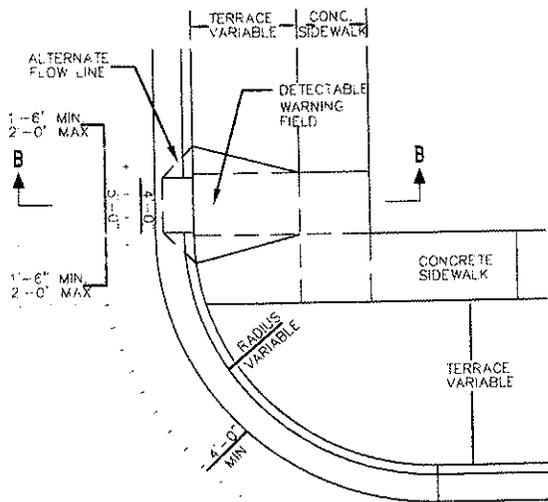
SECTION MISCELLANEOUS DETAILS



**PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)**

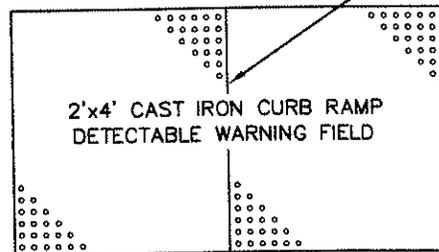


**PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)**



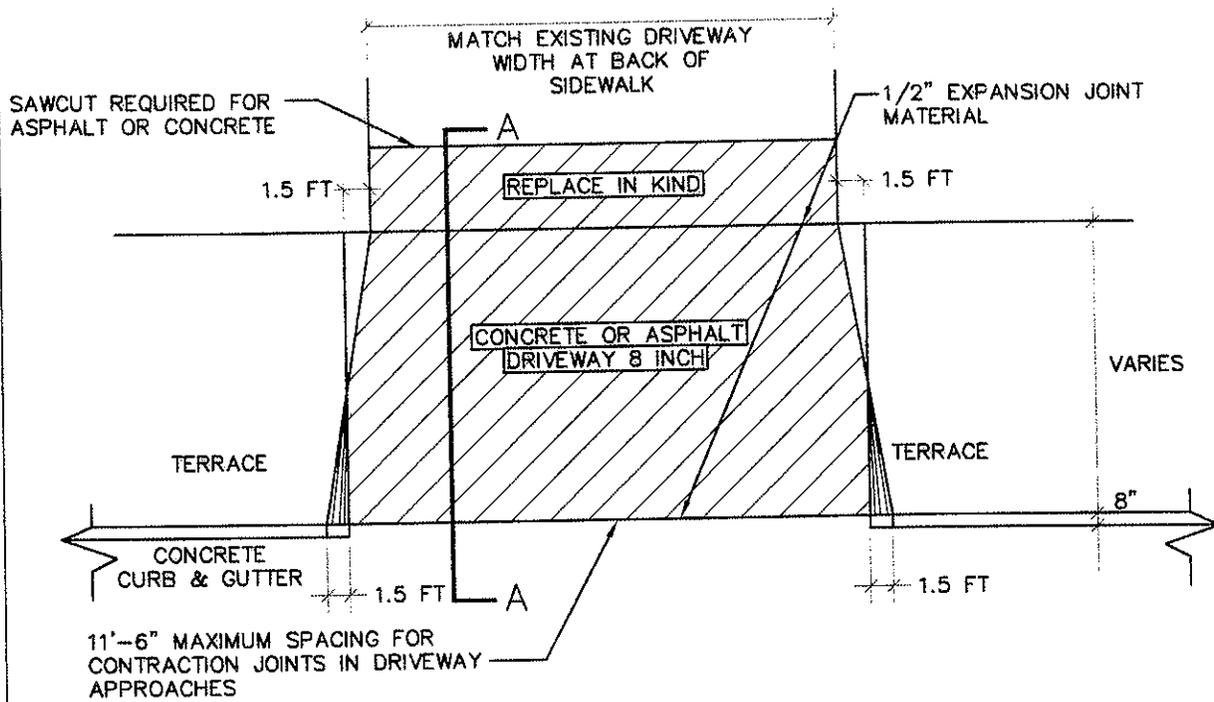
**PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)**

**NEENAH # R-4984-24B
TWO PLATES SHALL BE
COMBINED TO FORM A
24" X 48" UNIT**



CURB RAMP DETECTABLE WARNING FIELD

SECTION MISCELLANEOUS DETAILS



PRIVATE OR COMMERCIAL DRIVEWAYS



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REVISED JAN. 22, 2014
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