

RESTORATION SPECIFICATIONS FOR STREET/TERRACE OPENINGS

NOTE: Erosion control measures shall be in place prior to disturbance, and shall be removed when paved areas are restored and vegetative cover has been well-established over at least 80% of the disturbed area. Failure to place and maintain erosion control may result in the permit being rescinded.

A COPY OF THE STREET AND/OR TERRACE OPENING PERMIT SHALL BE ON THE JOB SITE AT ALL TIMES THAT CONSTRUCTION IS UNDER WAY.

Street

- Contact City Engineering at (920) 322-3470 at least two working days prior to excavation to determine the limits of pavement removal / restoration.
- Pavement restoration shall be in accordance with the City's "Specifications for Pavement Patching", latest edition.
- Contact City Engineering for patch inspection prior to replacing pavement. A minimum of 4 hours notice is required.

Terrace

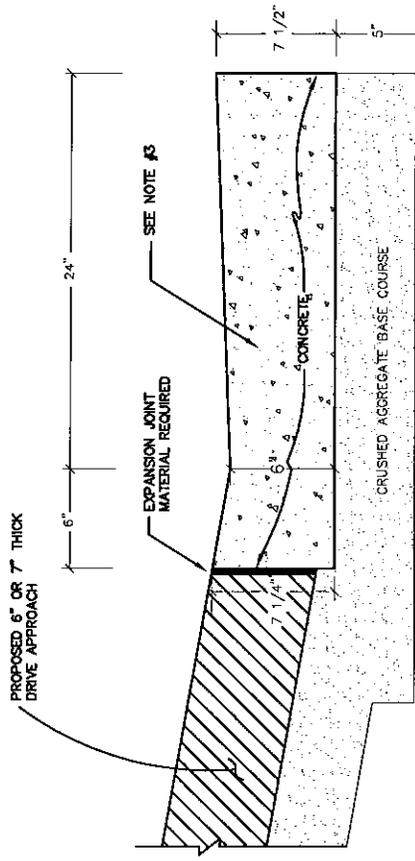
- Restore disturbed areas with topsoil, seed, fertilizer, and cellulose-type seed starter mulch or erosion blanket.
- Topsoil shall be shredded, placed a minimum of 4" thick and conforming to the slopes and elevations existing before disturbance of the terrace.
- Contractor shall water the restoration area one time when installed

Roadside Ditches

- Restore disturbed areas with topsoil, seed, fertilizer, and erosion matting for the entire area of ditch disturbed by construction.
- Topsoil shall be shredded, placed a minimum of 4" thick and conforming to the slopes and elevations existing before disturbance of the terrace.

Sidewalks

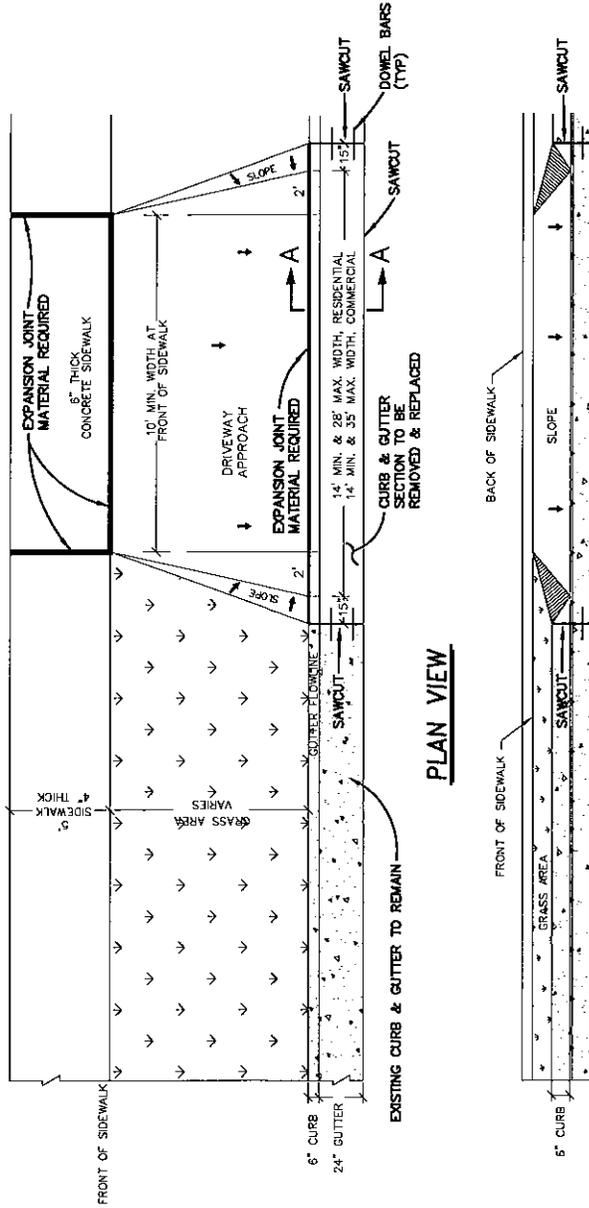
- A sidewalk permit shall be obtained from City Engineering prior to restoration of disturbed walks. All standards of the sidewalk permit and appurtenant details shall be followed.
- Handicap ramps disturbed by construction shall be replaced in accordance with current standards, including placing unpainted metal Detectable Warning Plates as manufactured by Neenah Foundry near the base of the ramp.
- Contact City Engineering for walk / ramp inspection prior to placing concrete. A minimum of 4 hours notice is required.



NOTE:
 EXISTING CURB & GUTTER TO BE SAWCUT & REMOVED FOR THE ENTIRE LENGTH OF PROPOSED DRIVEWAY OPENING AND REPLACED AS SHOWN PER SECTION A-A.

A CURB CUT PERMIT SHALL BE OBTAINED FROM THE CITY ENGINEERING OFFICE PRIOR TO START OF WORK

— SECTION A-A —



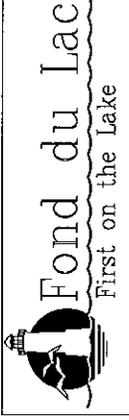
PLAN VIEW

PROFILE

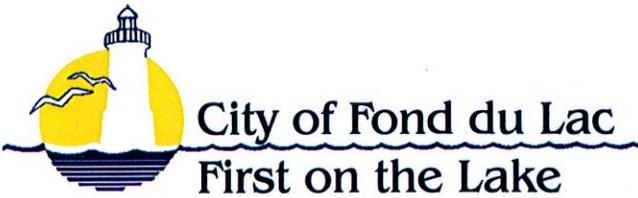
DOWEL BARS

- 1 1/4" DOWEL BARS, 18" IN LENGTH, TO BE SET 6" FROM FRONT AND BACK OF CURB, MID-HEIGHT
- DOWEL BARS SHALL BE ANCHORED INTO DRILL HOLES WITH AN APPROVED EPOXY GROUT
- THE FREE END OF DOWEL BARS SHALL RECEIVE A THIN UNIFORM COATING OF BOND BREAKER

— DRIVE APPROACH CURB OPENING —



DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND TRAFFIC DIVISION
 CITY OF FOND DU LAC, WISCONSIN



CITY ENGINEER'S OFFICE
160 SOUTH MACY STREET
PO BOX 150
FOND DU LAC WI 54936-0150
920-322-3470

SPECIFICATIONS FOR PAVEMENT PATCHING

1) General

- a. The City shall approve the selection of the Contractor to place the various types of patches listed below.
- b. The City Engineering Division shall be notified and an inspection made prior to and during patching.
- c. All pavement opening edges shall be sawed prior to replacement.
- d. All pavement openings shall be replaced a minimum of one foot wider on all sides to the same thickness as the original pavement.
- e. Trench shall be backfilled with slurry to sub-grade elevation.
- f. Temporary pavement patching shall be constructed with a slurry mix containing 2 bags of cement per cubic yard, and shall be finished in a manner that provides a smooth ride and joint with adjacent pavement. Permanent pavement shall be placed as soon as possible.

2) Concrete Pavements

- a. The pavement patch shall be for the entire lane width and a minimum of ten (10) feet in length of such lane.
- b. Dowel and ties bars shall be placed into adjacent undisturbed pavement and/or gutter and extending into the patch area per City Engineering detail drawings.
- c. No pavement areas less than four (4) feet wide shall be left next to the gutter flange or construction joints.
- d. The replacement concrete shall be either regular strength or high-early strength as determined by the City Engineer to the same thickness and type as originally specified.
- e. The sides of existing concrete and sub-grade shall be wet down before the new concrete is placed.
- f. When the new concrete is poured, it shall be puddles to eliminate voids in the patch.
- g. The concrete patches shall be barricaded and allowed to cure for a minimum of 4 to 7 days before opening to traffic or as determined by the City Engineer.
- h. The concrete patches shall be cured by the "Impervious Coating Method" as specified by the Wisconsin Department of Transportation. Any concrete poured after October 1st shall also be treated with two treatments of boiled linseed oil. The specifications for this method are on file with the City Engineer or his representative.

3) Bituminous Pavements

- a. The final surface patch shall be for the entire lane width and a minimum of ten (10) feet in length or as directed by the City Engineer or his representative.
- b. In multiple layer pavements, the pavement opening or hold shall be placed a minimum of one (1) foot wider on all sides with the bottom layer and each succeeding layer shall be a minimum of one (1) foot wider with the final surface course being a minimum of ten (10) feet in length and the entire lane width.

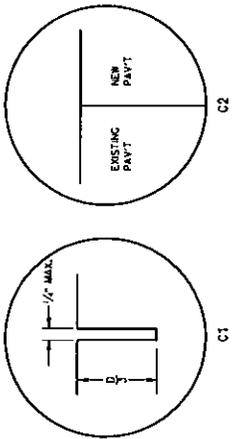
4) Bituminous Recapped Pavements

- a. The patch shall be of the same material and thickness as the original pavement and it shall be a minimum of ten (10) feet in length and the entire width or as directed by the City Engineer or his representative.
- b. No base pavement area less than four (4) feet wide shall be left next to the gutter flange.
- c. The bituminous patch shall be replaced with the same material in accordance with the original recapping specifications.

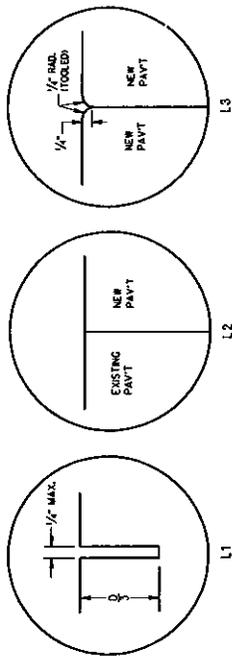
GENERAL NOTES

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.
 CONCRETE BASE PATCHES OF EXISTING UNDOUBELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.
 DO NOT SEAL OR FILL JOINTS.

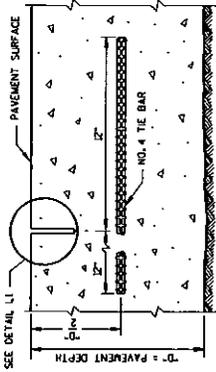
- ① ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY.
- ② APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.
- ③ THE CONTRACTOR MAY USE AN ENGINEER-APPROVED BOND BREAKER IN LIEU OF THE BARS FOR SINGLE LANE BASE PATCHES UP TO 15 FEET IN LENGTH.



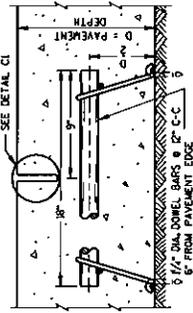
TRANSVERSE JOINTS



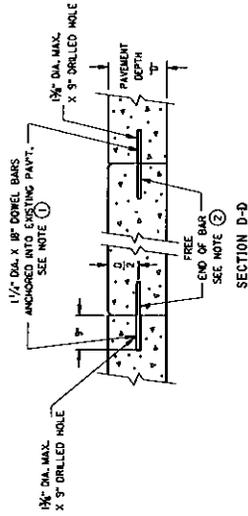
LONGITUDINAL JOINTS



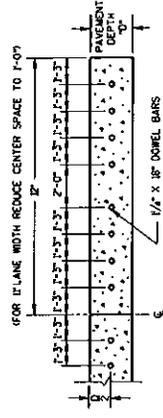
**SECTION C-C
SAWED LONGITUDINAL JOINT**



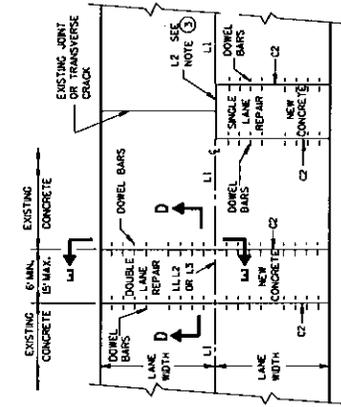
**SECTION F-F
CONTRACTION JOINT**



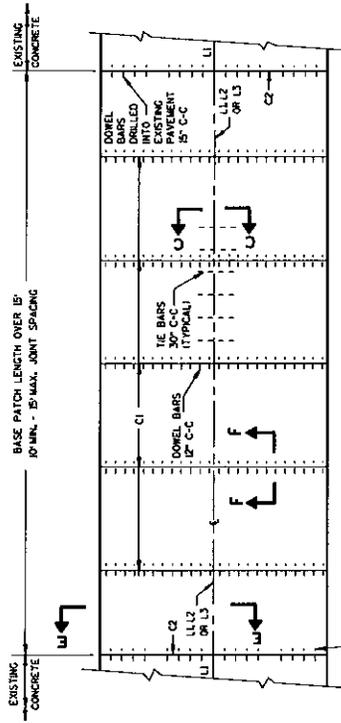
SECTION D-D



**SECTION E-E
SPACING OF DOWEL BARS
DRILLED INTO EXISTING PAVEMENT**

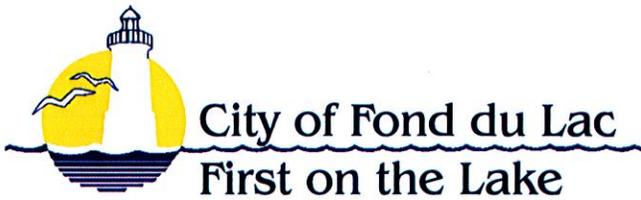


**PLAN VIEW
CONCRETE BASE PATCH
15' MAXIMUM LENGTH**



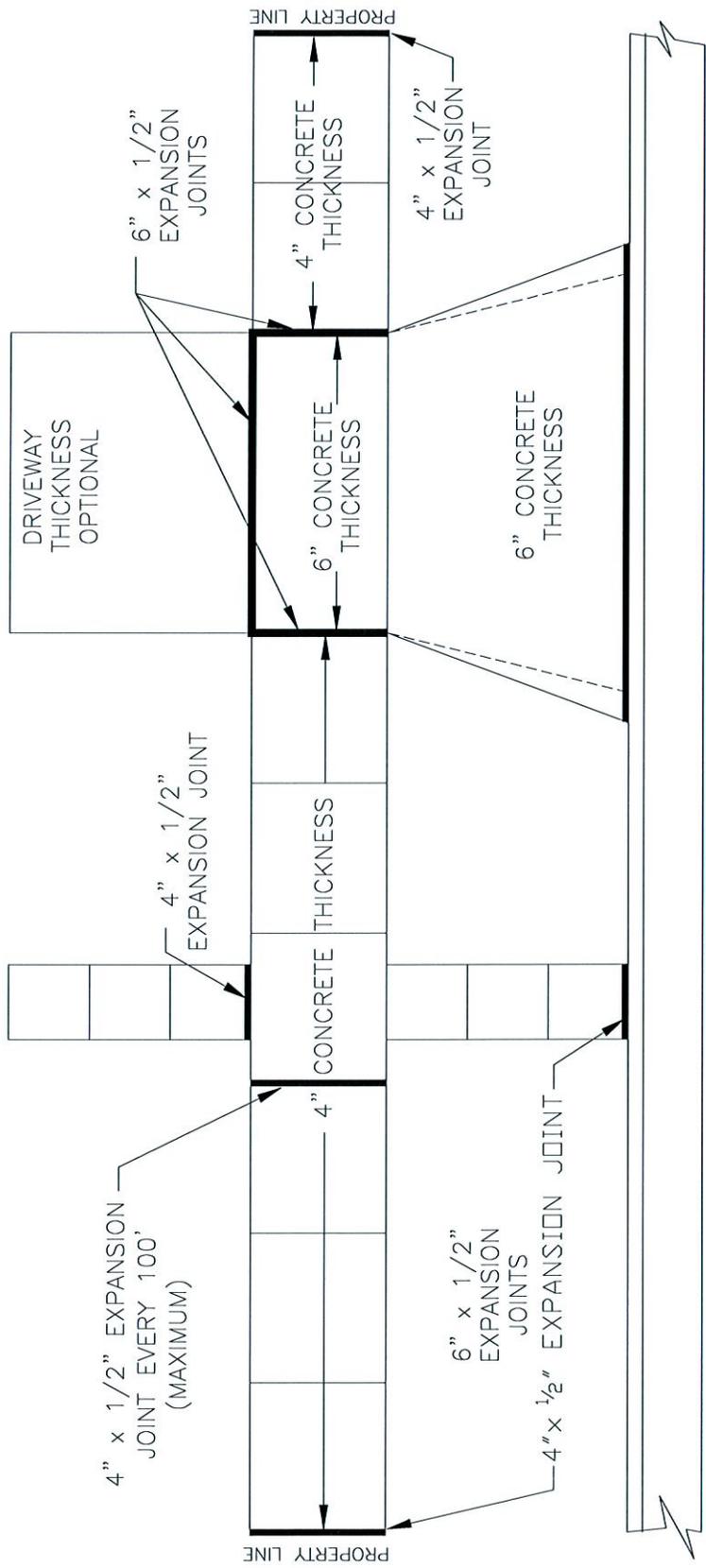
**PLAN VIEW
MULTI-LANE CONCRETE BASE PATCH
GREATER THAN 15' IN LENGTH**

BASE PATCHING CONCRETE
 STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION



**SIDEWALK CONSTRUCTION
INFORMATION
CITY OF FOND DU LAC –
ENGINEERING DIVISION
920-322-3470**

1. Secure a proper sidewalk permit at the Office of the City Engineer.
2. Forms of wood or metal shall be **straight** to insure required line of grade (sub grade and forms must be checked before concrete is placed – please call 920-322-3470 and ask to have your sidewalk forms checked).
3. There shall be 3” minimum well-compacted $\frac{3}{4}$ ” minus crushed limestone or $\frac{3}{4}$ ” crushed road gravel under sidewalks.
4. $\frac{1}{2}$ ” x 4” Expansion Joints shall be constructed using one-half (1/2) inch REFLEX Rubber Expansion Joint. Equivalent products must be approved by the City Engineer prior to installation. Expansion material at each end of 100’ and at each property line.
5. $\frac{1}{2}$ ” x 6” expansion material at each end of 6” sidewalk in driveway area.
6. Joints to be cut $\frac{1}{4}$ of concrete thickness.
7. All work shall be legibly stamped with contractor’s name, month and year.
8. All concrete sidewalk construction shall be cured by Wet Fabric Method, the Impervious Coating Method, or the Paper Method for at least 72 hours.
9. Walk must be barricaded and lighted if necessary.
10. Backfilling with suitable soil must be completed **immediately** upon stripping forms.
11. Take normal precautions to protect concrete during rainy or cold weather.
12. Before calling the City Engineer’s office for inspection, all forms must be on grade and compaction complete.
13. The edges and joints of the walk shall be finished with proper edging tools, having a $\frac{1}{4}$ ” radius.



1/4" PER FOOT PITCH
 REQUIRED ON SIDEWALK WIDTH
 MAXIMUM 5/8" PER FOOT

6" x 1/2" EXPANSION
 JOINT ALSO SHAPE TO
 FIT CURB RADIUS

TYPICAL SIDEWALK SECTION

(MINIMUM WIDTH 4.5')