



Division of Transportation
System Development
Northeast Regional Office
944 Vanderperren Way
Green Bay, WI 54304

Scott Walker, Governor
Dave Ross, Secretary
Internet web site: www.wisconsindot.gov

Telephone: (920)492-5643
E-mail: dot.dtsd.ne.utility@dot.wi.gov

SPECIAL SUPPLEMENTAL PERMIT PROVISIONS

It is understood and agreed that approval of this utility permit is subject to applicant's full compliance with the standard supplemental permit provisions, special supplemental provisions found listed below, and the Wisconsin Department of Transportation's *Utility Accommodation Policy (UAP)*, current edition (Also known as Highway Maintenance Manual – Chapter 9, Section 15)
<http://www.dot.wisconsin.gov/business/rules/property-uap.htm>

Permit Number: 2018266

1. (HMM 09-15-60-4.2) Send the LCS request to WisDOT for review and approval at the appropriate time in accordance with the following advance notifications guidelines:
 - a. 7 calendar days for any freeway ramp, lane or shoulder closure
 - b. 7 calendar days for full roadway closure of any state highway (detour involved)
 - c. 7 calendar days for closures that may impact oversize/overweight (OSOW) permits
 - d. 3 business days for closures non-freeway or shoulder closuresContact Josh Falk, (920) 366-8033 or joshua.falk@dot.wi.gov.
2. The most recent typical section for this location should be given to contractor in order to match it as closely as reasonably possible for the roadway restoration. Follow guidance set forth on sheet 13C9 for pavement repair and replacement.
3. (HMM 09-15-45-5.0) Restore any curb, gutter, pavement, shoulder, sidewalk, driveway, gravel base, ballast, or other highway element disturbed to the qualities, grades, compactions, conditions, etc., in accordance with WisDOT's [Standard Specifications for Highway and Structure Construction, current edition](#).

APPLICATION / PERMIT

TO CONSTRUCT, OPERATE and MAINTAIN UTILITY FACILITIES ON HIGHWAY RIGHT-OF-WAY

s.66.0831, 84.08, 85.15, 86.07(2), 86.16, 182.017 and such other applicable Wis. Stats.

1. Applicant (Utility facility owner) Name and Address Village of Hortonville PO Box 99 Hortonville, WI 54944		2. Work Start Date 8-23-2018	3. Work Finish Date* 8/24/2018	6. Location Description (¼ section, section, town, range; provide plat map or location sketch) NE-SW, Sect. 36, T22N, R15E	
9. Facility Type (Check all that apply): Size (Diameter, kV, pressure, # fibers, etc.) <input type="checkbox"/> Telecom: _____ <input type="checkbox"/> Electric: _____ <input type="checkbox"/> Gas/Oil: _____ <input checked="" type="checkbox"/> Water: 10" _____ <input type="checkbox"/> San Sewer: _____ <input type="checkbox"/> _____: _____ <input type="checkbox"/> Transmission <input type="checkbox"/> Service: Std <input checked="" type="checkbox"/> Distribution <input type="checkbox"/> Service: Exp		4. Is the work due to a WisDOT highway project? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		7. Work Location (Check/list all that apply) <input type="checkbox"/> Town: _____ <input checked="" type="checkbox"/> Village: <u>Hortonville</u> <input type="checkbox"/> City: _____ <input type="checkbox"/> County: <u>Outagamie</u>	
10. Facility Orientation (Check all that apply) <input checked="" type="checkbox"/> Crossing R/W <input checked="" type="checkbox"/> Parallel R/W <input checked="" type="checkbox"/> Underground <input type="checkbox"/> Overhead <input type="checkbox"/> Structure attachment		12. Proposed Work Methods (Check all that apply) <input type="checkbox"/> Trench <input type="checkbox"/> Plow <input type="checkbox"/> Casing <input type="checkbox"/> Rock blasting <input checked="" type="checkbox"/> Open cut pavement Bore: <input type="checkbox"/> Hydraulic (Auger/Jack) <input type="checkbox"/> Pneumatic (Mole) <input type="checkbox"/> Directional 1 (Manually tracked) <input type="checkbox"/> Directional 2 (Computer tracked) <input type="checkbox"/> Unknown (At this time)		8. Highway (Check all that apply) <input checked="" type="checkbox"/> WIS <u>15</u> <input type="checkbox"/> US _____ <input type="checkbox"/> Interstate _____ <input type="checkbox"/> _____	
11. Work Types (Check all that apply) <input type="checkbox"/> New construction <input type="checkbox"/> Improve/repair existing <input type="checkbox"/> Removal <input checked="" type="checkbox"/> Maintenance <input type="checkbox"/> Discontinued, left in place <input type="checkbox"/> Joint installation		Attach to poles/towers: <input type="checkbox"/> New <input type="checkbox"/> Existing <input type="checkbox"/> Guys** (Diameter) (Name of existing owner) (** Provide details for all guy wires on plan sheets) Subsurface utility excavation: <input type="checkbox"/> Water jetting <input type="checkbox"/> Vacuum Tree/vegetation control: <input type="checkbox"/> Cut and/or trim <input type="checkbox"/> Mow <input type="checkbox"/> Chemically treat		13. Work Zone Description (Check all that apply) <input checked="" type="checkbox"/> Full road closure: detour <input type="checkbox"/> Full road closure: temporary <input type="checkbox"/> Lane closure: without flagging <input type="checkbox"/> Lane closure: with flagging <input type="checkbox"/> Lane encroachment (2 feet or less) <input type="checkbox"/> Intersection/roundabout <input type="checkbox"/> Shoulder/parking lane closure <input type="checkbox"/> Off shoulder: within clear zone <input type="checkbox"/> In R/W: outside clear zone <input type="checkbox"/> Near R/W line: within clear zone <input type="checkbox"/> Near R/W line: outside clear zone <input type="checkbox"/> Not applicable	
14. Is the proposed facility near a survey monument? (See HMM 09-15-35) <input type="checkbox"/> Yes (Call: 1-866-568-2852 or e-mail: geodetic@dot.wi.gov) <input checked="" type="checkbox"/> No		15. Will any appurtenances be installed with the facility? (If yes, provide a description and/or specification of each item with this application.) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		16. Trans 401 project designation? (For all Major projects, provide a formal erosion control plan with this application. See HMM 09-15-55) <input checked="" type="checkbox"/> Minor <input type="checkbox"/> Major	
17. Are any environmental permits, certifications or approvals required from other regulatory agencies? (If yes, provide a copy of each item or proof of agency coordination with this application.) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					

*** NOTE: If the work described is not completed by the "Work Finish Date" specified, this permit is null and void, and the work shall not be completed unless authorized through a subsequent permit or an approved time extension. *ANY PERMIT ISSUED IS REVOCABLE.***

18. Utility Person Responsible for Construction Carl McCrary	(Area Code) Telephone Number 920-378-3958	19. Utility or Project 24/7 Emergency Contact Ryan St. John	(Area Code) Telephone Number 920-819-1749
20. Is the utility a member of Diggers Hotline? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, provide line-locate number _____		It is understood and agreed that approval is subject to applicant's full compliance with the pertinent statutes, as well as any rules and regulations of other jurisdictional agencies, which may be more restrictive, and with the Wisconsin Department of Transportation's Utility Accommodation Policy (UAP) , current edition. http://www.dot.wisconsin.gov/business/rules/property-uap.htm	
21. Provide additional project work details, if needed (Continue on back or include separate page) Beginning August 23rd at 6:30 p.m. (STH15, near the Warner St intersection) will be fully closed for emergency repairs to the water main distribution system in that area; this detour is expected to last for appr. 12 hours, open before morning.		August 6, 2018 Carl McCrary	
22. If not employed by applicant, authorized representative's company name and address		(Signature of Authorized Representative – If filled via computer, Brush Script font) Director of Public Works (Title and/or print name) 920-378-3958 (Authorized Representative Telephone Number)	
		(Date) dpw@vohortonville.com (Authorized Representative E-mail Address)	



This permit does not transfer any land; nor give, grant or convey any land right, right in land, nor easement in WisDOT right-of-way. It is not assignable or transferrable. If ownership in a utility facility changes, WisDOT may void and supersede a permit and reissue it to the new owner upon request and with sufficient proof of ownership.

↓ For Wisconsin DOT Use Only ↓

<input checked="" type="checkbox"/> THE UTILITY SHALL NOTIFY WisDOT 3 DAYS BEFORE STARTING WORK AT: Region contact, title, office address, telephone number, and e-mail address Linda Skaleski, Utility Permit Coordinator Northeast Region Office 944 Vanderperren Way Green Bay, WI 920-492-4166 dotdtsdneutilitycoordination@dot.wi.gov	<input checked="" type="checkbox"/> REVIEW ALL SUPPLEMENTAL PERMIT PROVISIONS <input checked="" type="checkbox"/> REVISIONS MADE to DRAWINGS or OTHER PAGES <input checked="" type="checkbox"/> Lane Closure System notification required: HMM 09-15-60 <input type="checkbox"/> Insurance or performance bond required <input type="checkbox"/> Joint installation: See permit(s) # _____ <input type="checkbox"/> Private utility (Non-public ownership and/or use) <input type="checkbox"/> Expedited Service Connection Permit <input type="checkbox"/> This permit voids & supersedes # _____ issued: _____ <input type="checkbox"/>	Date Application Received 8/6/2018 Date Application Completed Date Application Denied Permit Issuance Date 8/9/2018 Permit Extension Date Permit Number 2018266
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**APPLICATION/PERMIT TO CONSTRUCT, OPERATE AND MAINTAIN UTILITY FACILITIES ON HIGHWAY
RIGHT-OF-WAY (continued)**

Wisconsin Department of Transportation

DT1553

Use this section to provide information that does not fit on front page

INDEMNIFICATION

This Applicant shall save and hold the State, its officers, employees, agents, and all private and governmental contractors and subcontractors with the State under Chapter 84 Wisconsin Statutes harmless, as allowed by Wisconsin law, from actions of any nature whatsoever (including any by Applicant itself) which arise out of, or are connected with, or are claimed to arise out of or be connected with any of the work done by the Applicant, or the construction or maintenance of facilities by the Applicant, pursuant to this permit or any other permit issued by the State for location of property, lines or facilities on highway right-of-way, (1) while the Applicant is performing its work, or (2) while any of the Applicant's property, equipment, or personnel, are in or about such place or the vicinity thereof, or (3) while any property constructed, placed or operated by or on behalf of Applicant remains on the State's property or right-of-way pursuant to this permit or any other permit issued by the State for location of property, lines or facilities on highway right-of-way; including without limiting the generality of the foregoing, all liability, damages, loss expense, claims, demands and actions on account of personal injury, death or property loss to the State, its officers, employees, agents, contractors, subcontractors or frequenters; to the Applicant, its employees, agents, contractors, subcontractors, or frequenters; or to any other persons, whether based upon, or claimed to be based upon, statutory (including, without limiting the generality of the foregoing, worker's compensation), contractual, tort, or whether or not caused or claimed to have been caused by active or inactive negligence or other breach of duty by the State, its officers, employees, agents, contractors, subcontractors or frequenters; Applicant, its employees, agents, contractors, subcontractors or frequenters; or any other person.

Without limiting the generality of the foregoing, the liability, damage, loss, expense, claims, demands and actions indemnified against shall include all liability, damage, loss, expense, claims, demands and actions for damage to any property, lines or facilities placed by or on behalf of the Applicant pursuant to this permit or any other permit issued by the State for location of property, lines or facilities on highway right-of-way in the past or present, or that are located on any highway or State property or right-of-way with or without a permit issued by the State, for any loss of data, information, or material; for trademark, copyright or patent infringement; for unfair competition or infringement of personal or property rights of any kind whatever. The Applicant shall at its own expense investigate all such claims and demands, attend to their settlement or other disposition, defend all actions based thereon and pay all charges of attorneys and all other costs and expenses of any kind arising from any such liability, damage, loss, claims, demands and actions.

Any transfer, whether voluntary or involuntary, of ownership or control of any property constructed, placed or operated by or on behalf of the Applicant that remains on the State's property or right-of-way pursuant to this permit shall not release Applicant from any of the indemnification requirements of this permit, unless the State is notified of such transfer in writing. Any acceptance by any other person or entity, whether voluntary or involuntary, of ownership or control of any property constructed, placed or operated by or on behalf of the Applicant that remains on the State's property or right-of-way pursuant to this permit, shall include acceptance of all of the indemnification requirements of this permit by the other person or entity receiving ownership or control.



STANDARD SUPPLEMENTAL PERMIT PROVISIONS

For Wisconsin Department of Transportation Utility Facility Permits

Acronyms used in this document:

- BMPs: Best Management Practices
- R/W: Right-of-Way
- UAP: Utility Accommodation Policy
- HMM: Highway Maintenance Manual
- WisDOT: Wisconsin Department of Transportation

1. GENERAL WORK REQUIREMENTS

- As required by Wisconsin Statute 182.0175, when filing your Diggers Hotline request ensure that this WisDOT Permit Number is in the Remarks Section of the Diggers Hotline Ticket.
- The Permittee shall bore under all driveways, private entrances, wetlands, culverts, and all roadways.
- The Permittee is responsible for obtaining any permits from the Department of Natural Resources, or any other agency that may have an interest in the area impacted by the construction of the utility facility.

2. **WORK DUE TO A WISDOT HIGHWAY PROJECT.** This approved permit constitutes acceptance that the work in this permit is compatible with permit requirements. This approved permit is NOT a Work Plan Approval/Start Work Notice as required by Trans 200.05(07). This approved permit is NOT a Work Plan Approval/Start Work Notice for a non-Trans 220 project. This approved permit does NOT approve or authorize an agreement between WisDOT and the Permittee for compensable work due to a WisDOT highway project.

3. **PERMIT TERM.** For as long as the Permittee continues to own, operate and maintain this utility facility within WisDOT R/W in accordance with the terms of its permit and WisDOT's UAP, this permit shall be valid.

4. **REVOCATION BY WISDOT.** WisDOT may revoke this permit if its own use of the R/W would be facilitated by the full or partial relocation of the Permittee utility facility, and shall provide the Permittee with written notice prior to revocation. At which time WisDOT shall work with the Permittee to find a suitable replacement area on R/W near the terminated location if possible. WisDOT shall not compensate the Permittee to move its utility facility in keeping with WisDOT's policy on compensable / non-compensable utility facility moves.

5. **TERMINATION BY PERMITTEE.** The Permittee may terminate this permit upon 60 days written notice to WisDOT. Upon such termination, the Permittee shall either remove its communication cable facility from the R/W, or abandon it in-place provided it does not constitute an environmental hazard.

6. **HOLIDAY WORK RESTRICTIONS for 2018.** The Permittee shall not work on January 1, May 28, July 4, September 3, and November 22, and December 25.

7. **WORK-TIME RESTRICTIONS.** Weekday work is from sunrise to sunset. Weekend work may be allowed upon prior approval from WisDOT. No work shall take place during nighttime hours unless authorized by WisDOT.

8. **TRAFFIC CONTROL.** All work zone traffic control will be in accordance with the Wisconsin Manual on Uniform Traffic Control Devices. Additional guidance is available from WisDOT through a booklet entitled, *Work Zone Safety, Guidelines for Construction, Maintenance, and Utility Operations* or from HMM 09-15-60.

9. **WORK AREA PROTECTION DURING NON-WORK TIMES.** The Permittee may store vehicles, equipment, or materials on the non-freeway R/W provided they are placed as close to the non-freeway R/W line as possible, but no less than 30 feet from the edge of the nearest travel lane. If vehicles, equipment, or materials must be parked or stored within an area that is less than 30 feet from the edge of the nearest travel lanes, appropriate temporary concrete or water-filled barriers, signing, and devices shall be utilized. The Permittee shall ensure that any excavations left open during non-work times are well marked and secured from public intrusion.

The primary objective will be maintenance of a safe traffic and working environment. No operation shall to any extent pose any hazard neither to, nor in any manner influence traffic at any time.

All vehicles used to conduct the work operations will be equipped with conspicuously visible roof-mounted revolving or strobe lights. These lights shall be in operation just prior to and during the time the work operations are being conducted. Hazard warning lights on the vehicles must also be operating.

10. **WORK RESTRICTIONS.** For the purposes of placement of these facilities, as stated with this permit request, the State security fence shall not be opened or damaged.

11. **CLEAR ZONE / DRAINAGE INTERFERENCE.** No topsoil or other excavated piles of soil shall be deposited in any manner that interferes with the clear zone or regular drainage patterns within the highway.

As much as possible, all equipment, operations, and spoil material should be situated or accomplished off of the highway.

12. **EROSION CONTROL.** The Permittee shall use the appropriate erosion control BMPs to contain soil directly at the site to prevent disturbed soil from getting into nearby waterways and wetlands. All appropriate erosion control devices shall be in place **prior to starting construction activities**. Temporary seeding shall be used as necessary after rough grading and before completion of the project. The Permittee shall ensure that erosion control BMPs used to protect restored areas remain in place until replacement vegetation achieves sustained growth.

The Permittee shall take all precautions necessary to prevent mud, dirt, or other debris from being deposited onto the shoulder or pavement of all access roads or highways. Any materials deposited on the shoulder or pavement shall be removed immediately. Ruts may remain as is if the Permittee is accessing the R/W from private property, but appropriate erosion control BMPs shall be used to contain disturbed soil at the site.

13. **R/W RESTORATION.** Upon completion of the project a variation of erosion control measures will be required to restore the area that has been disturbed allowing it to return to the manner it was in previous to the construction. All disturbed sites will require a seed mixture that includes a quick sprouting variety with fertilizer and mulch. Other possibilities that may have to be considered are Geotextile fabric, e-mat, and stone ditch checks.

The Permittee is responsible to assure that erosion control measures used to protect restored areas remain in place until replacement vegetation achieves sustained growth.

The basic drainage pattern of the highway shall remain undisturbed by the permitted work. Upon project completion, all spoils, debris, refuse, and waste resulting from the permitted work shall be removed from the work site. Should future maintenance work on the Permittee's utility facility result in the disturbance of the existing R/W, the Permittee shall restore the R/W to its original condition as soon as possible.

Any works or operations not in full compliance herewith shall justify an order by any inspecting officer of WisDOT to cease all further progress on the work, and to accomplish all restorations of disturbed areas, including full restorations of the pavement

Upon completion of the work, all disturbed areas shall be restored according to requirements stated in the Utility Accommodation Policy, HMM 09-15-65, and in a manner satisfactory to WisDOT

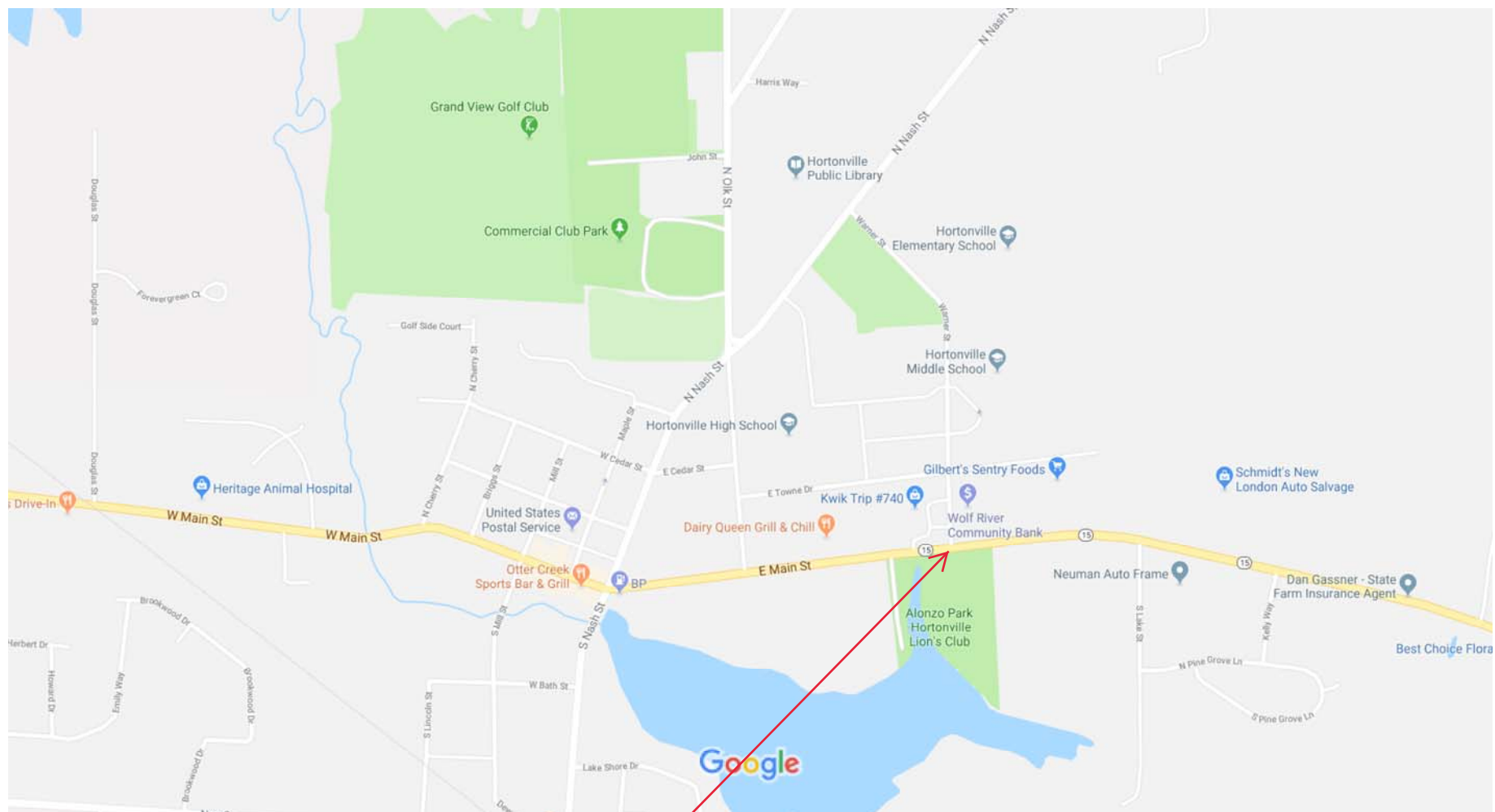
14. **NOTIFICATIONS / CONTACTS.** Notify Northeast Region permit coordinator/field inspector, by phone or email, three days prior to the start of construction. Notify Diggers' Hotline 800/242-8511 at least three working days prior to the start of any excavation. It is the obligation of the permittee to determine the location of, and avoid any damage to, the pre-existing lines and facilities of others.

15. **TREES.** Prevent the spread of oak wilt by treating all cut surfaces and abrasions sustained **between April 1 and September 30** by healthy oak trees and saplings with a thorough application of tree paint immediately upon discovering a wound. Between these dates, also paint the cut surfaces of the stumps of all healthy oak trees and saplings immediately after cutting, whether remaining in place or grubbed.

This permit approves the installation of facilities as shown on the diagram provided. If the above assigned position is not feasible, an alternate location of facilities shall be approved prior to installing the facilities by contacting the permit coordinator approving the permit. If the facility is later discovered to be at a location other than that designated by the permit you may be required to relocate the facility at your expense.

This permit is subject to the attached drawings, these supplemental provisions, and WisDOT's Utility Accommodation Policy. New supplemental provisions may be added, or the existing ones deleted or amended in the future as different issues arise during the installation, operation and maintenance of the permittee's facilities.

Google Maps

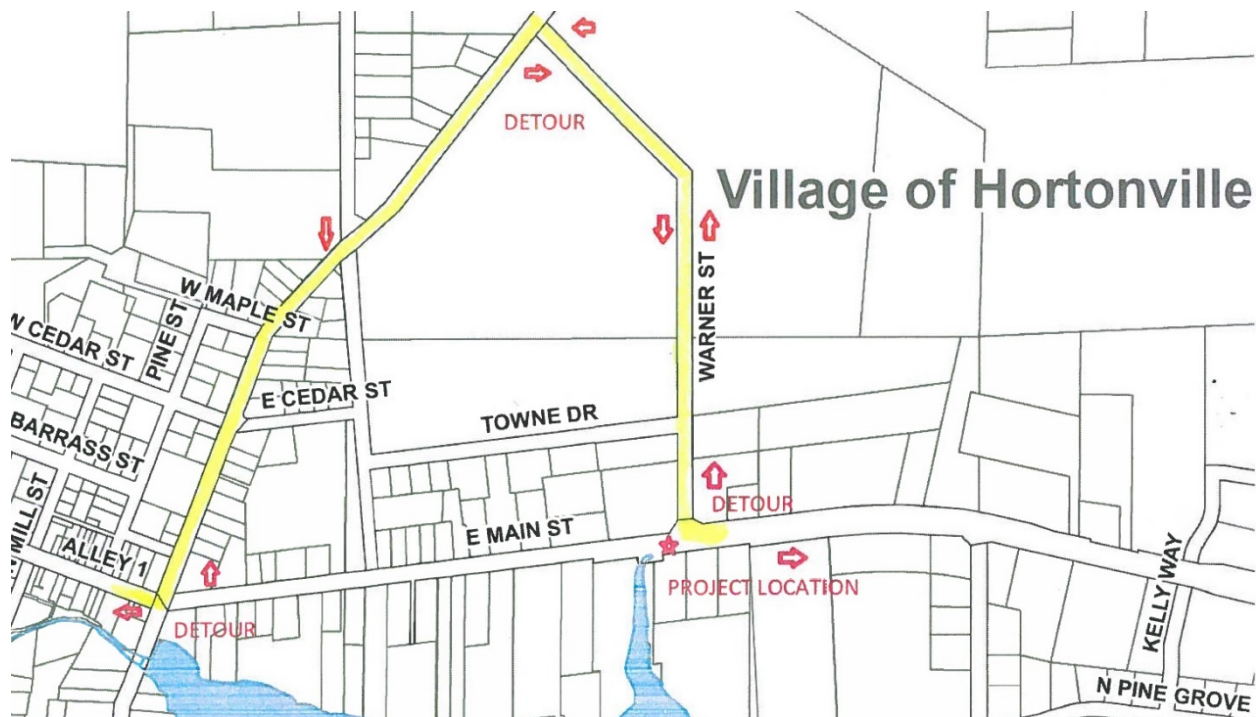


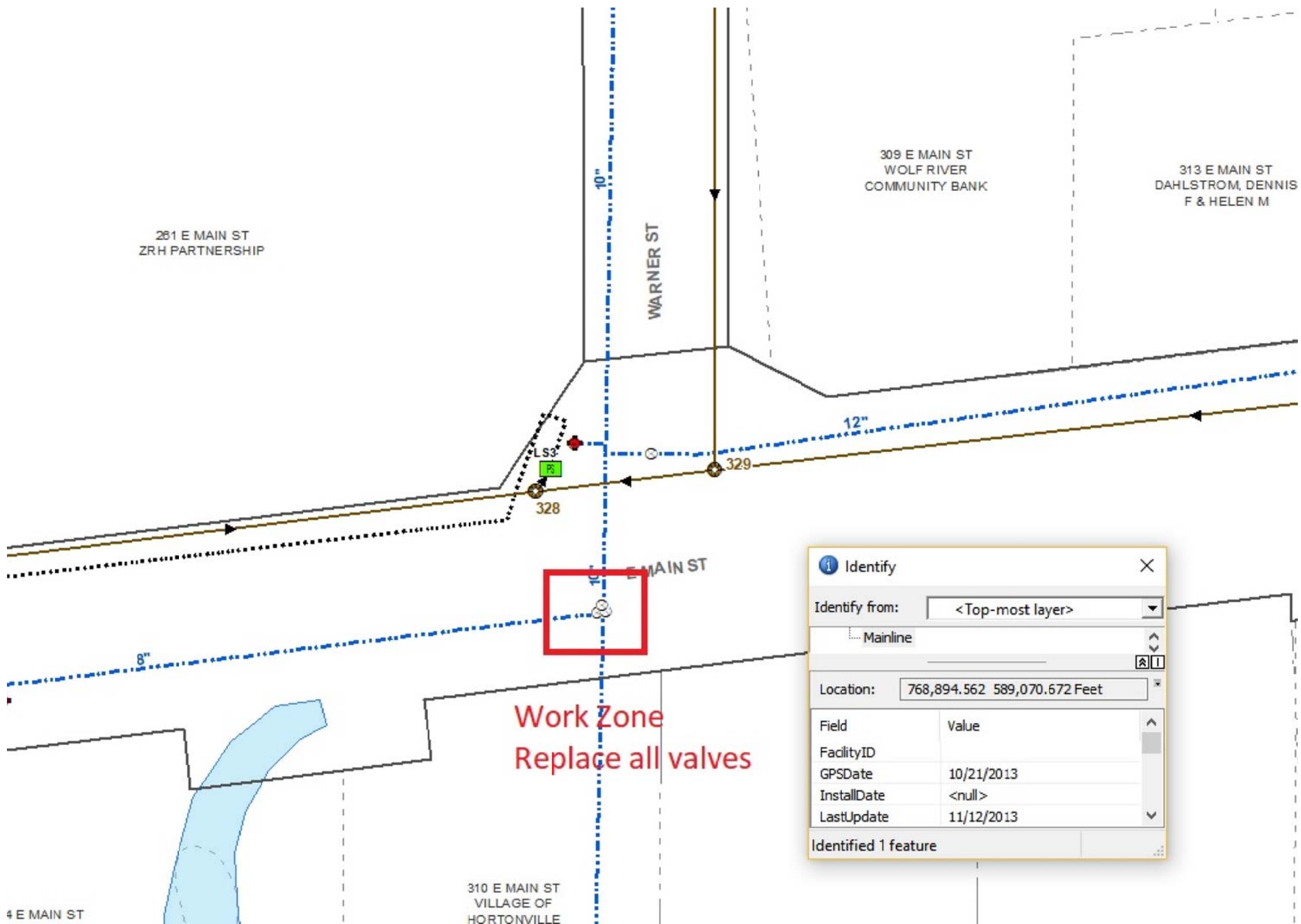
Map data ©2018 Google 500 ft

[Set a home address](#)[Set a work address](#)**CLICK LINK TO VIEW THIS
AREA IN GOOGLE MAPS**

STH 15 Detour in the Village of Hortonville

Beginning August 23rd at 6:30 p.m. (E Main St., near the Warner St intersection) will be fully closed for emergency repairs to the water main distribution system in that area; this detour is expected to last for approximately 12 hours, or until the project is complete. East bound traffic on STH 15 will be diverted onto CTY TK M north to N Nash St then Warner St. south back to 15. West bound traffic on 15 will be detoured up Warner St. to N Nash St, then south back to 15. Businesses on E. Main St. will be accessible throughout the duration of the construction project. For any questions related to this project, please contact the Hortonville Administration Office at 920-779-6011.





Identify

Identify from: <Top-most layer>

Mainline

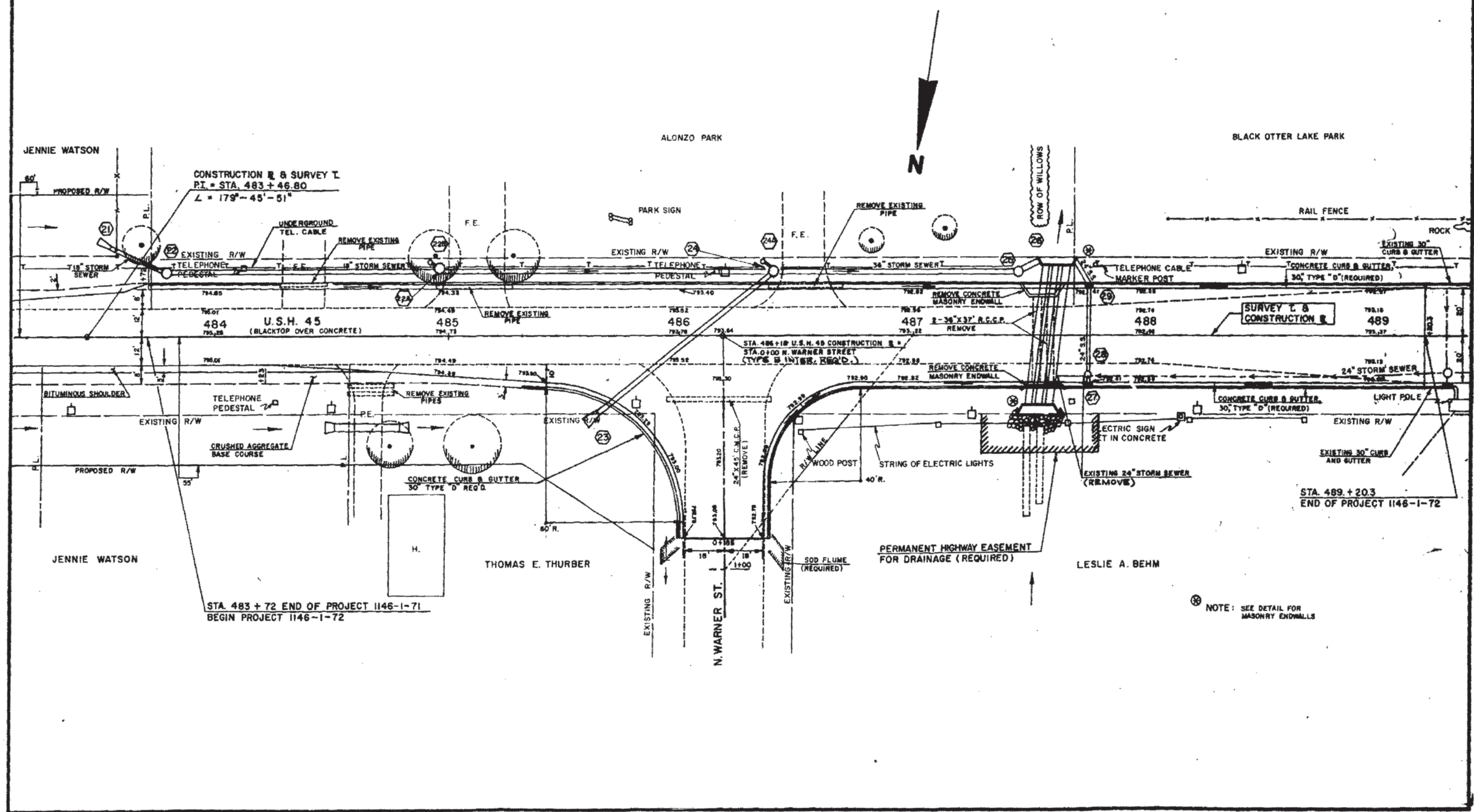
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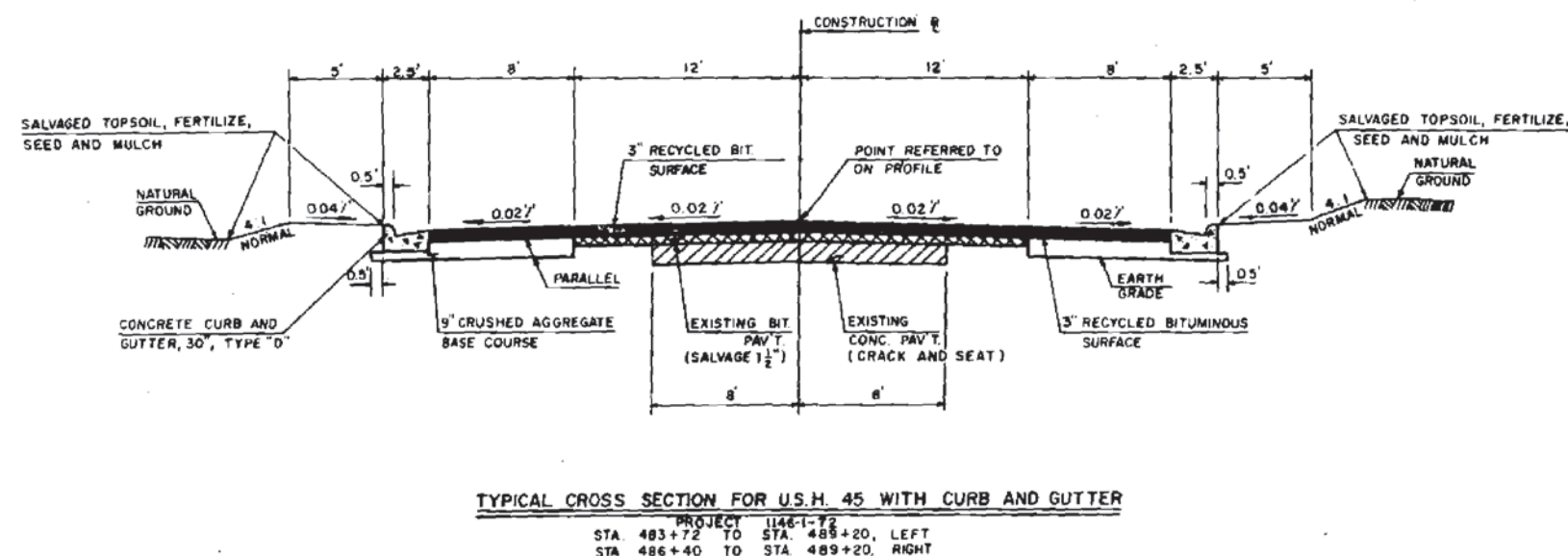
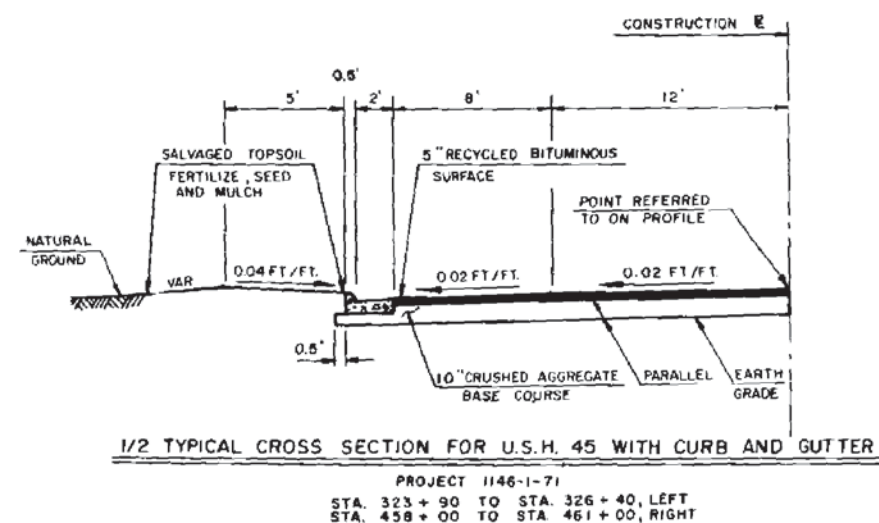
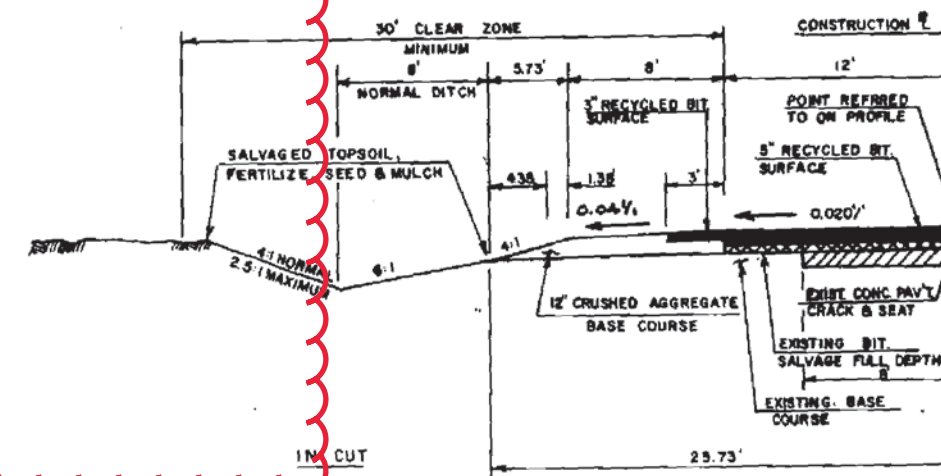
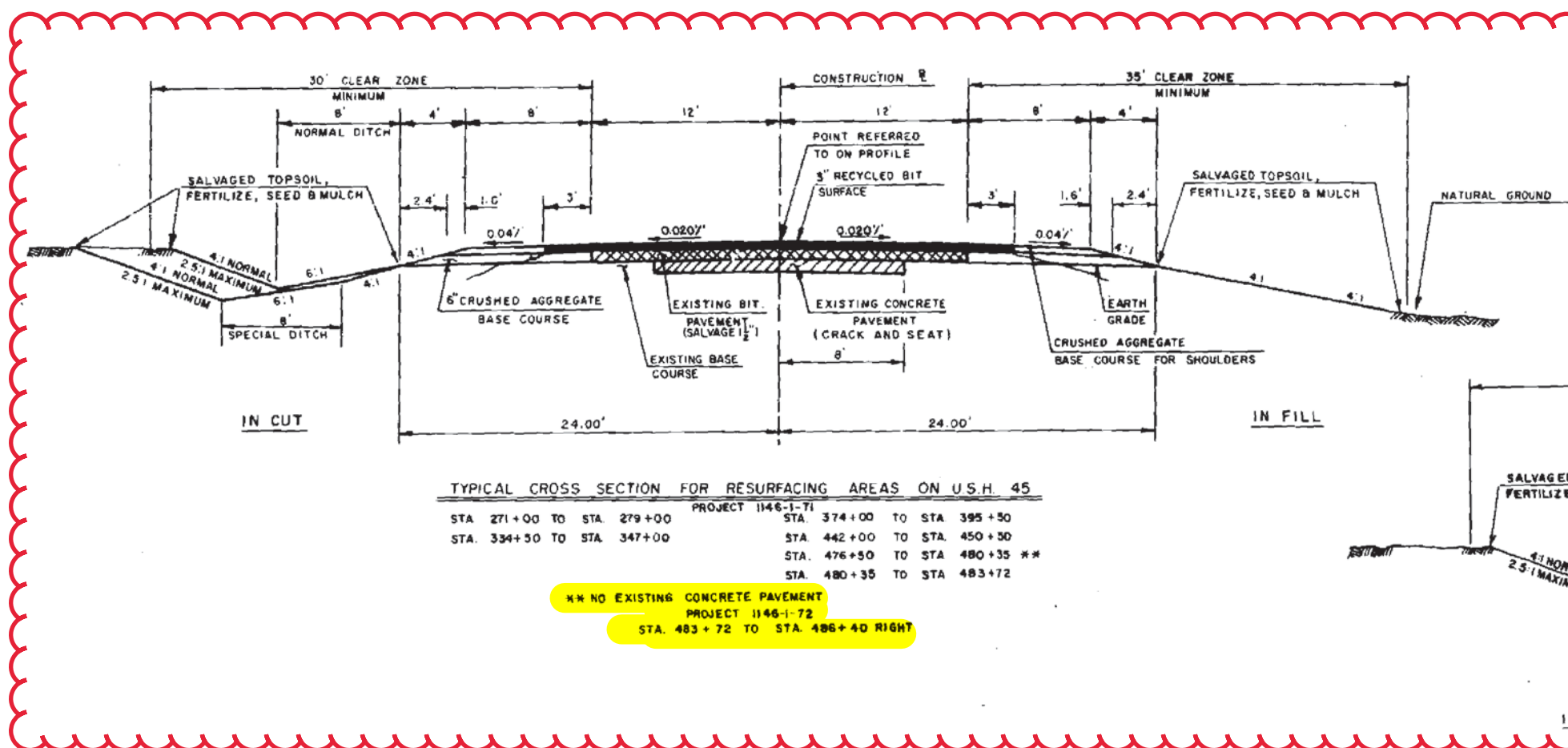
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GPSDate	10/21/2013
InstallDate	<null>
LastUpdate	11/12/2013

Identified 1 feature

Note: This sheet was added to show stationing that corresponds to the typical section show on the following page for restoration purposes.

STATE PROJECT NUMBER	SHEET NO.
1146-1-72	216
CONSTRUCTION DETAILS FOR	
U.S.H. 45	OUTAGAMIE COUNTY





5.1 Poles and Anchor Rods

Completely remove replaced poles from the highway. No replaced pole shall be allowed to remain, in whole or in part, nor shall it be sawed off. The pole's hole shall be properly backfilled and compacted. All anchor rods shall be removed or cut off one foot below ground level.

5.2 Pavement Restoration Requirements

Sawcut all pavement full-depth when open cutting. See [Attachment 3](#) for examples when pavement is not sawcut.

Concrete pavement shall be restored in conjunction with WisDOT standard detail drawing [13C9](#). Avoid creating additional joints when possible. The minimum dimension for a patch will be 6' by the full lane or shoulder width. High early strength concrete may be specified when needed. Additional guidance on concrete pavement repair can be found in [FDM 14-25-10, Exhibit 10.1](#).

The minimum dimension for an asphaltic concrete patch will be 6' by the distance to the nearest joint or seam. Use hot mix asphalt whenever possible. If cold patch is needed in an emergency, replace with hot mix as soon as possible. Figure 4 below shows improper asphaltic pavement restoration.



Figure 4: Both patches improperly backfilled and compacted and not patched to the nearest joint or seam.

6.0 Temporary Driveways for Utility Construction

Do not build temporary driveways for utility construction unless WisDOT has granted prior approval. If a temporary driveway is needed, submit a separate STH connection permit application [dt1504](#) for WisDOT review along with the utility permit application. The reason(s) for needing the temporary driveway should be included on both applications. A temporary driveway may not be approved, so utilities are advised to have a contingency access plan. Do not locate a temporary driveway within the functional area of an intersection. See Figure 5 for an example.

Existing driveways may be used for utility construction as long as permission is obtained from the property owner. A STH connection permit is not required unless there will be a significant change in use, e.g., an agricultural driveway will experience heavy truck traffic or a major increase in the number of vehicle trips per day. In this situation, submit a STH connection permit to make temporary modifications to the driveway.

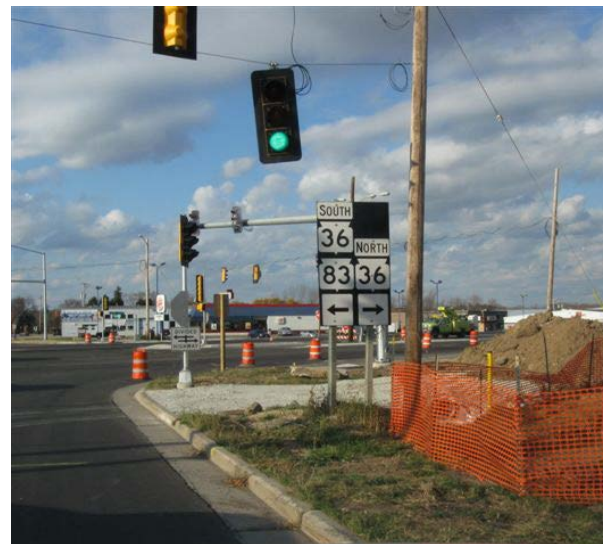
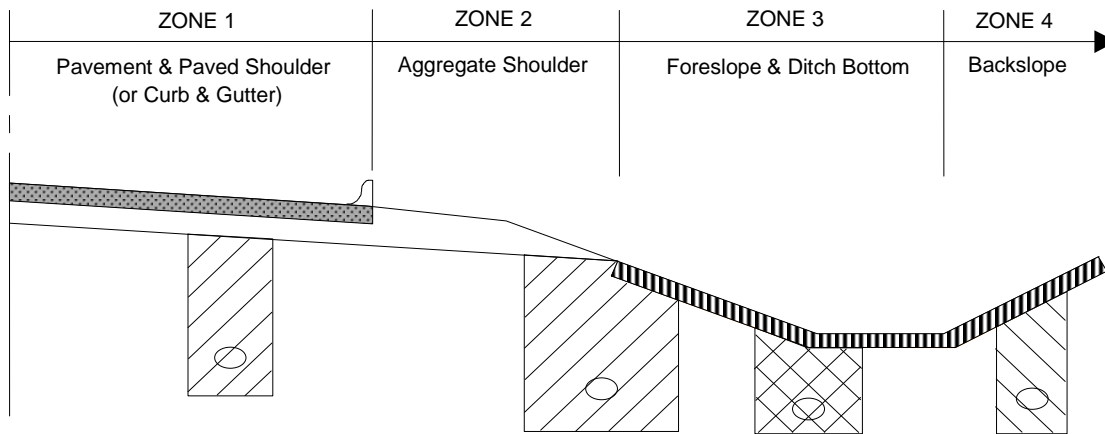


Figure 5: Temporary driveway within intersection.

Attachment 2: Backfilling Excavation Detail Drawings



LONGITUDINAL EXCAVATION

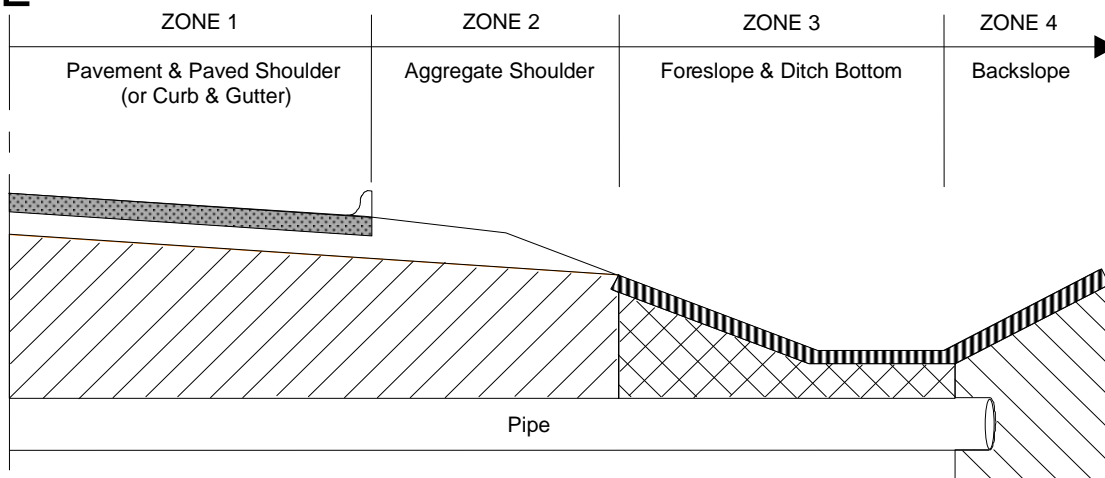


KEY

	Slurry Backfill
	Granular Backfill
	4" Topsoil
	Spoil backfill



TRANSVERSE EXCAVATION



NOTES

- 1) Use slurry backfill to replace the excavated material in ZONES 1 and 2.
- 2) If the work area covers BOTH ZONES 2 & 3, use slurry backfill to replace the excavated material.
- 3) Use granular backfill to replace the excavated material in ZONE 3. Granular backfill placement and gradation shall conform to WisDOT's Standard Specifications for Road and Bridge Construction, current edition.
- 4) Place backfill in ZONES 3 & 4 to within 4" of the finished grade to allow for topsoil placement.
- 5) Suitable spoil backfill may be used in ZONE 4 at the discretion of WisDOT.

SLURRY BACKFILL

The materials shall be placed in a clean concrete mixer truck and thoroughly mixed in the following quantities FOR EACH CUBIC YARD REQUIRED:

- SAND 1,350 lbs
- #1 STONE 750 lbs
- #2 STONE 1,150 lbs
- WATER 25 gals (0 to -0.5 gal variance)

No additional water will be allowed. The above weights are damp weights. Just prior to placing the slurry backfill, the mixer shall be run at mixing speed for one full minute to assure an even mixture.



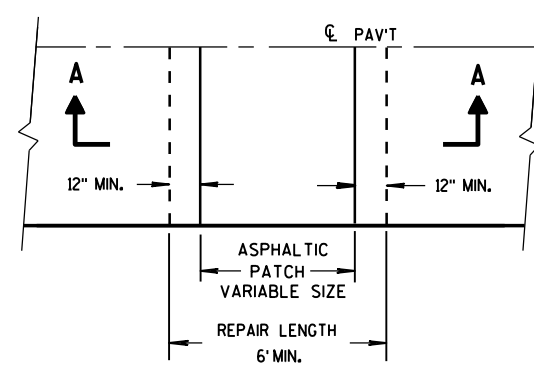
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

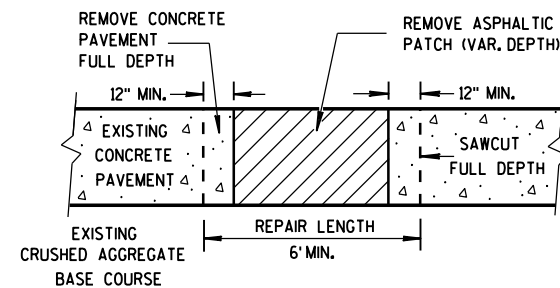
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

① DOWEL BARS MIGHT NOT EXIST.

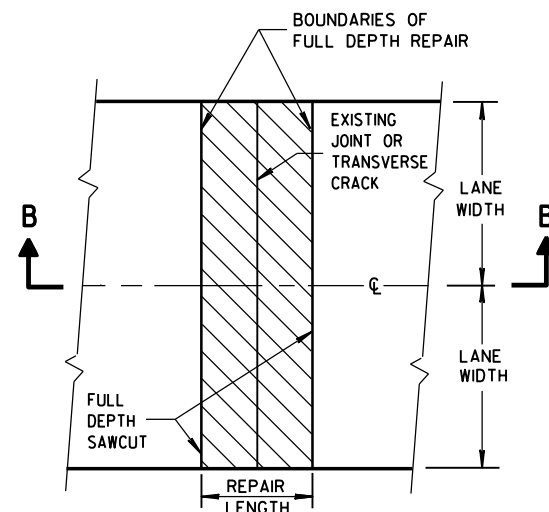


PLAN VIEW

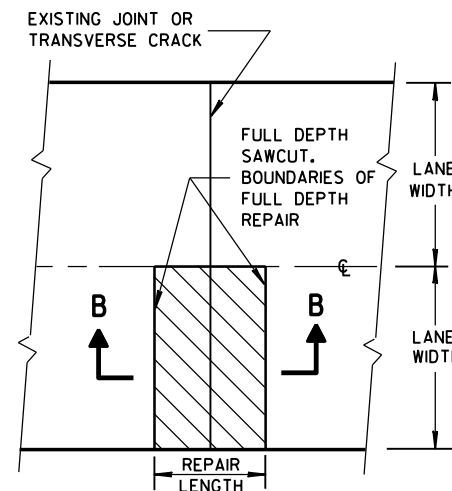


SECTION A-A

HMA PATCH REMOVAL

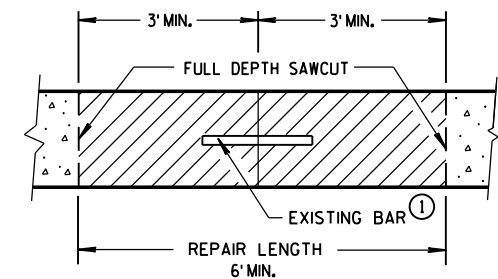


PLAN VIEW
(DOUBLE LANE REPAIR)



PLAN VIEW
(SINGLE LANE REPAIR)

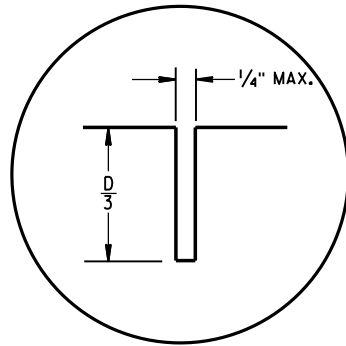
FULL DEPTH CONCRETE PAVEMENT REMOVAL



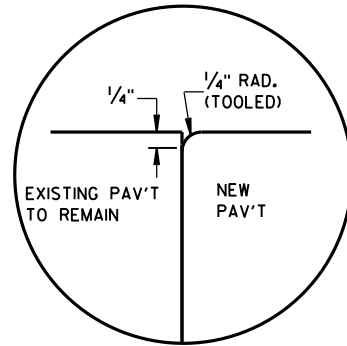
SECTION B-B
CONCRETE REMOVAL

CONCRETE PAVEMENT REPAIR
AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

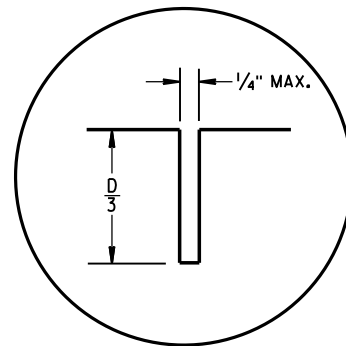


C1

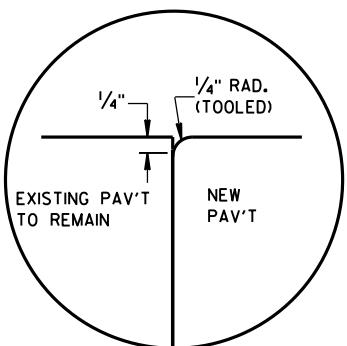


C2

TRANSVERSE JOINTS

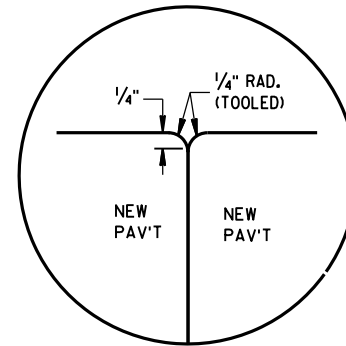


L1



L2

LONGITUDINAL JOINTS



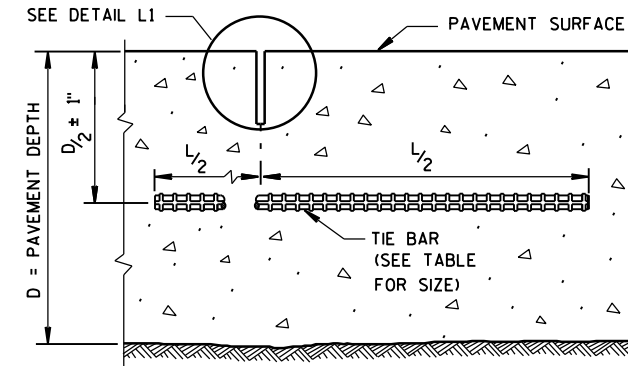
L3

TIE BAR TABLE

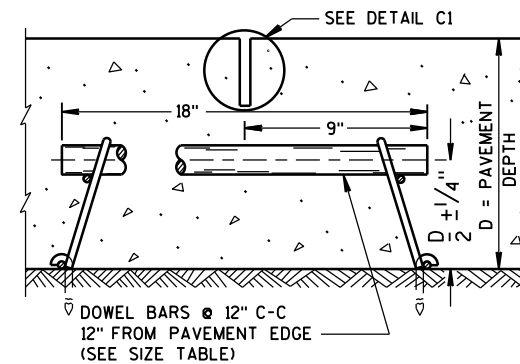
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



SECTION C-C
SAWED LONGITUDINAL JOINT



SECTION F-F
CONTRACTION JOINT

GENERAL NOTES

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

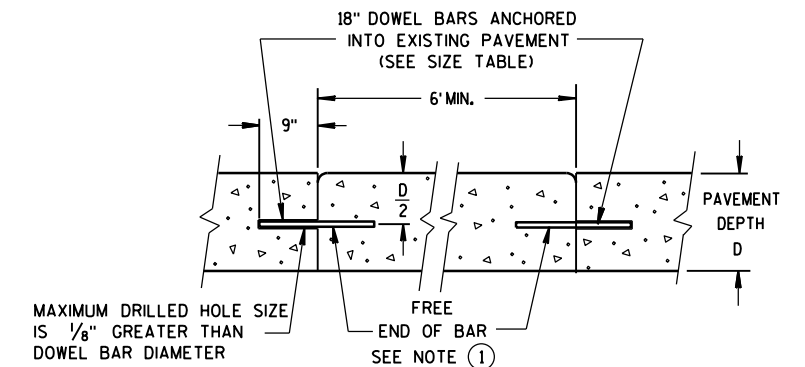
CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

DO NOT SEAL OR FILL JOINTS.

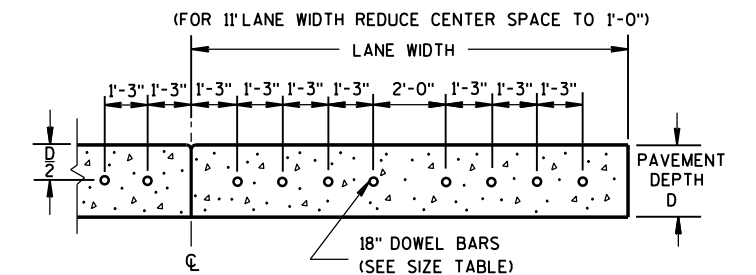
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

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.

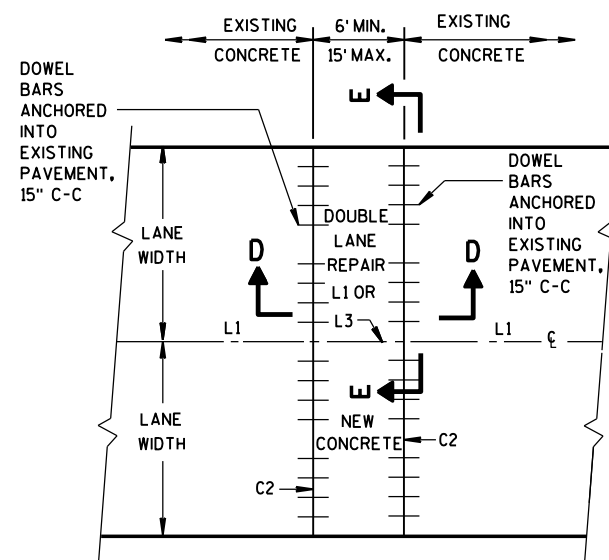
① APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.



SECTION D-D

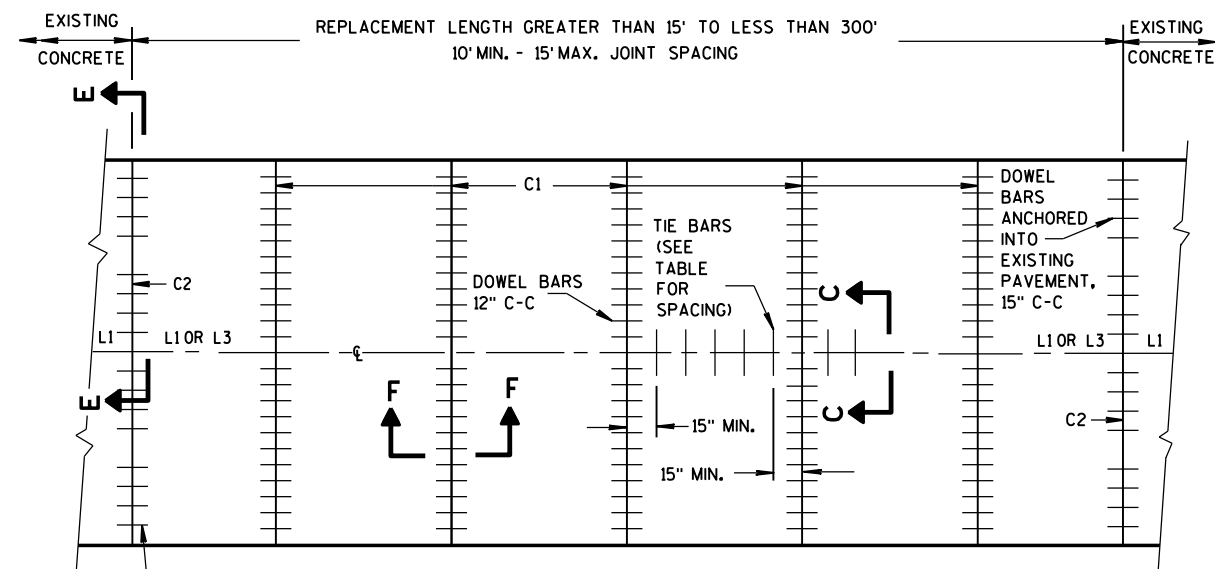


SECTION E-E
DRILLED DOWEL BAR CONSTRUCTION JOINT



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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'

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



Version 13 **Standard Detail Drawing 13c9** (sheet abc) October 26, 2015
Concrete Pavement Repair and Replacement

References:
[FDM 14-25-10](#)

Bid items associated with this drawing:

ITEM NUMBER	DESCRIPTION	UNIT
204.0100	Removing Pavement.....	SY
415.0060 - 0199	Concrete Pavement (inch)	SY
415.1080 - 1199	Concrete Pavement HES (inch).....	SY
416.0610	Drilled Tie Bars.....	EACH
416.0620	Drilled Dowel Bars	EACH
416.1710	Concrete Pavement Repair.....	SY
416.1715	Concrete Pavement Repair SHES.....	SY
416.1720	Concrete Pavement Replacement.....	SY
416.1725	Concrete Pavement Replacement SHES	SY
690.0250	Sawing Concrete.....	LF

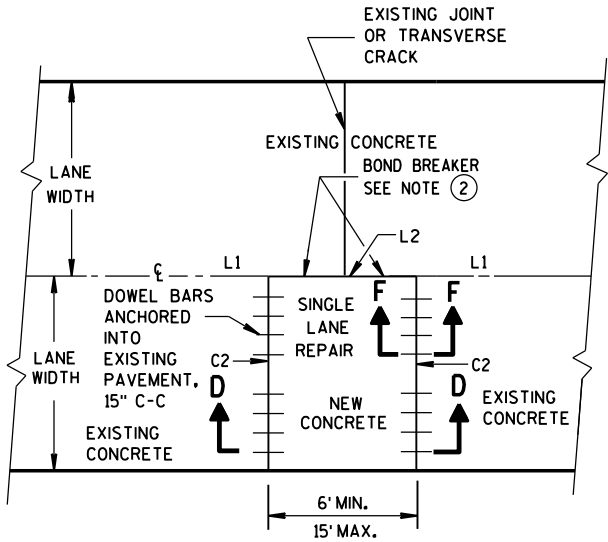
Standardized Special Provisions associated with this drawing:

STSP NUMBER	TITLE
NONE	

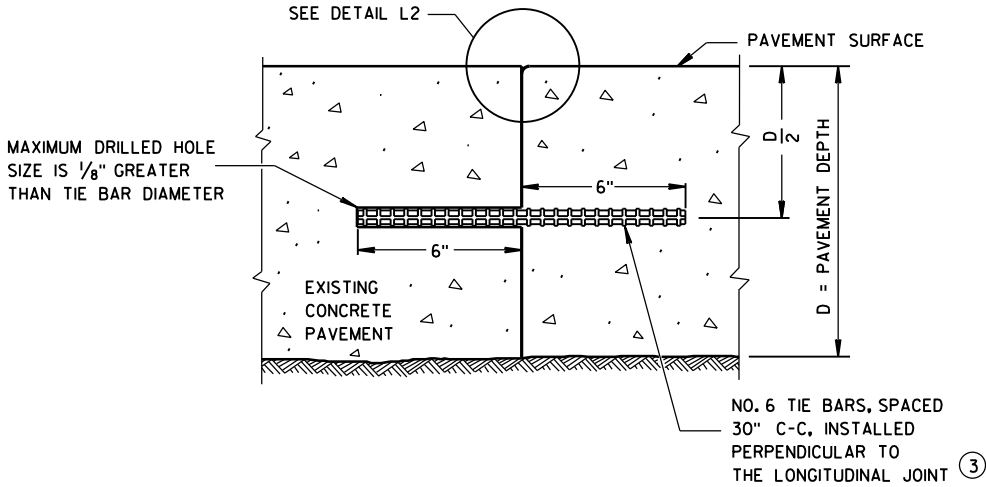
Other SDDs associated with this drawing:
[SDD 13c11](#) Rural Doweled Concrete Pavement
[SDD 13c13](#) Urban Doweled Concrete Pavement

Design Notes:
Always include SDDs 13c9 sheets "a", "b" and "c" together in plan sets.
If Concrete Pavement Repair or Concrete Pavement Repair SHES are part of a project, designers should also consider including Concrete Pavement Replacement or Concrete Pavement Replacement SHES and Concrete Pavement (inch) or Concrete Pavement HES (inch) bid items since unforeseen pavement repairs may extend beyond 15 feet in length.

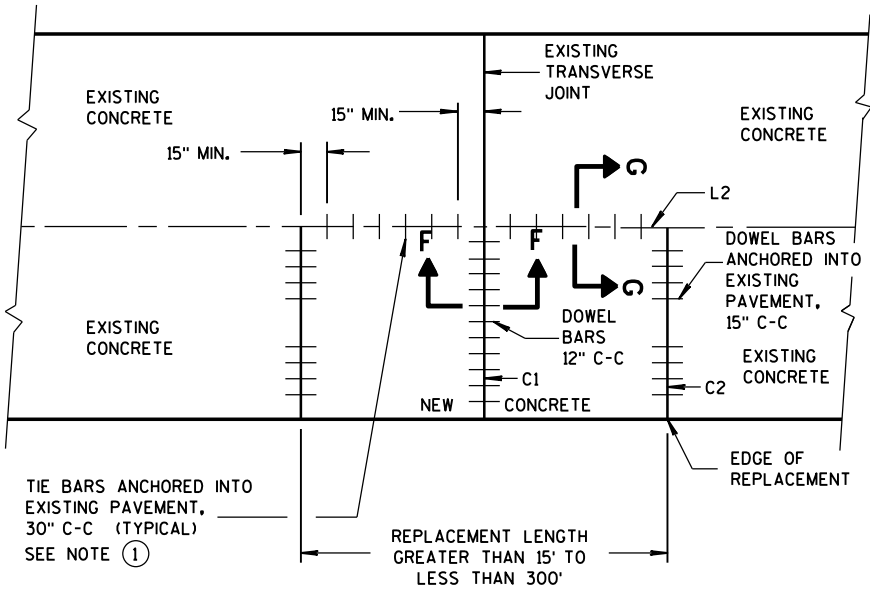
Contact Person:
Myungook (MK) Kang (608) 246-7957



PLAN VIEW
**SINGLE LANE
CONCRETE PAVEMENT REPAIR**



SECTION G-G
**TIE BARS ANCHORED
INTO EXISTING PAVEMENT**



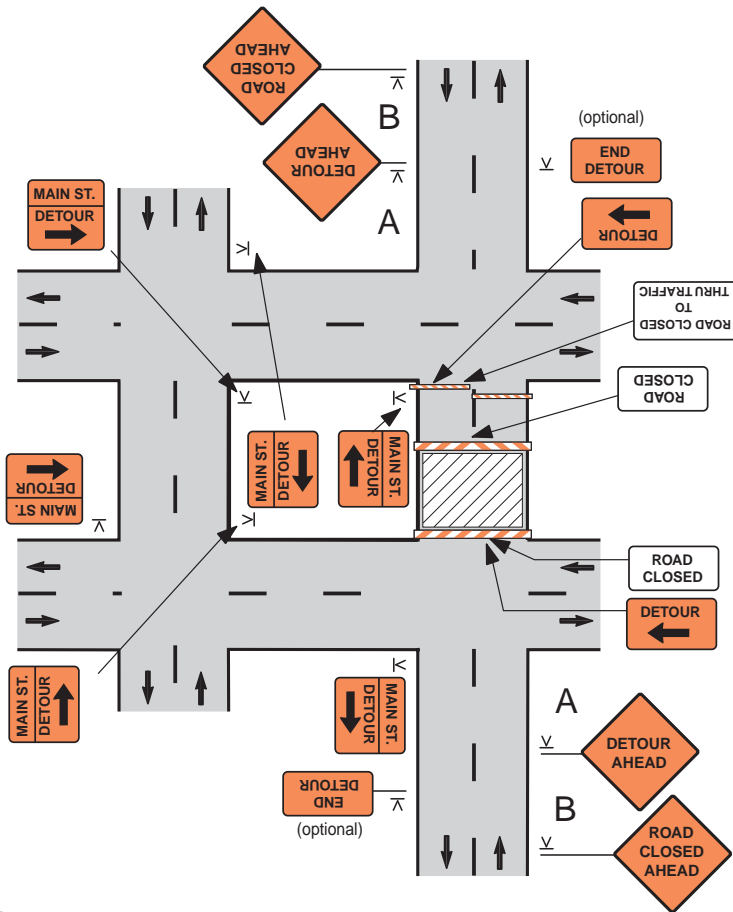
PLAN VIEW
**SINGLE LANE
CONCRETE PAVEMENT REPLACEMENT**

GENERAL NOTES

- WITH THE APPROVAL OF THE ENGINEER, 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 IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.
- USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.
- ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

CONCRETE PAVEMENT REPAIR AND REPLACEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept., 2015 DATE	/S/ Peter Kemp, P.E. PAVEMENT SUPERVISOR
FHWA	

Street Closure with Detour



Notes

- | | Speed Limit (mph) | Sign Spacing (ft) |
|--|-------------------|-------------------|
| 1. This layout should be used for streets and roads without posted route numbers. See figure 6H-8 and 6H-9 of the MUTCD Part 6 for closing and detouring a numbered highway. | 25-30 | 200 |
| 2. When a side road intersects the roadway within the work zone, place Type III barricades and ROAD CLOSED signs at the intersections, and provide advance signing of the closure on the side road approaches. | 35-40 | 300 |
| | 45-50 | 500 |
- A street name sign may be mounted with the DETOUR sign and should be used if a local road is detoured onto a state highway. If used, the street nameplate goes above the DETOUR sign.
 - A DETOUR sign with an advance turn arrow may be used in advance of a turn and should be used on multilane streets.
 - DETOUR signs may be located on the far side of intersections.

Speed Limit (mph)	Sign Spacing A, B (ft)
25-30	200
35-40	350
45-50	500