

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH-P 0012(330)	1	30

Revised BRO 3-6-26

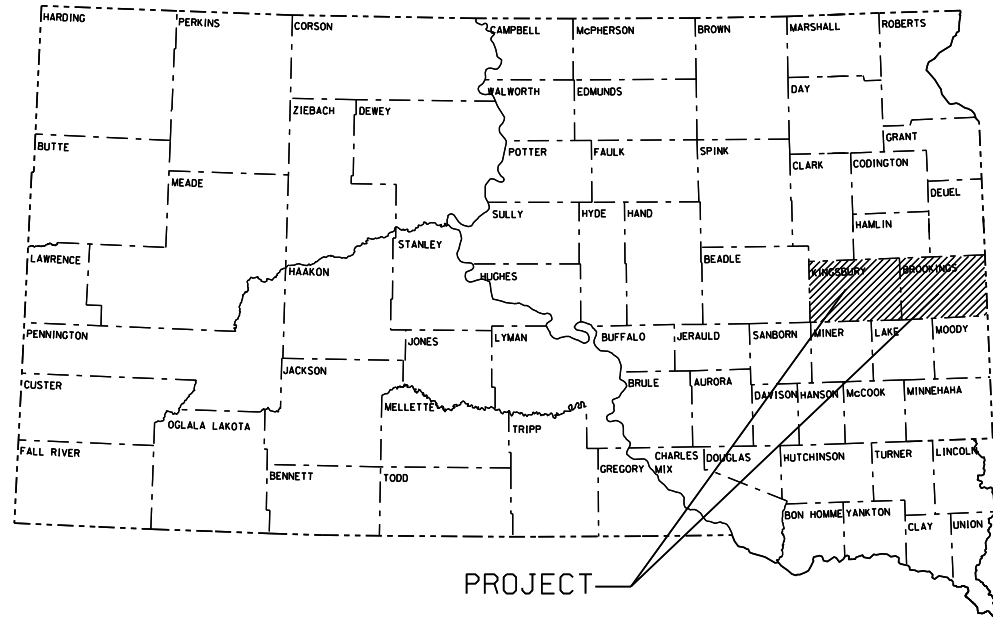
STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED  
PROJECT NO.  
NH-P 0012(330)  
BROOKINGS &  
KINGSBURY COUNTIES  
CONCRETE PAVEMENT REPAIR  
PCN 09X6

INDEX OF SHEETS

Sheet No. 1	Title Sheet
Sheet No. 2	Project Layout Maps
Sheet No. 3-4	Estimate of Quantities & Environmental Commitments
Sheet No. 5-12	Plan Notes and Tables
Sheet No. 13-18	Typical Sections
Sheet No. 19-18	Typical Steel Bar Layouts
Sheet No. 18-22	Traffic Control Sheets
Sheet No. 23-30	Standard Plates

PLOT SCALE - 1:20000



PROJECT

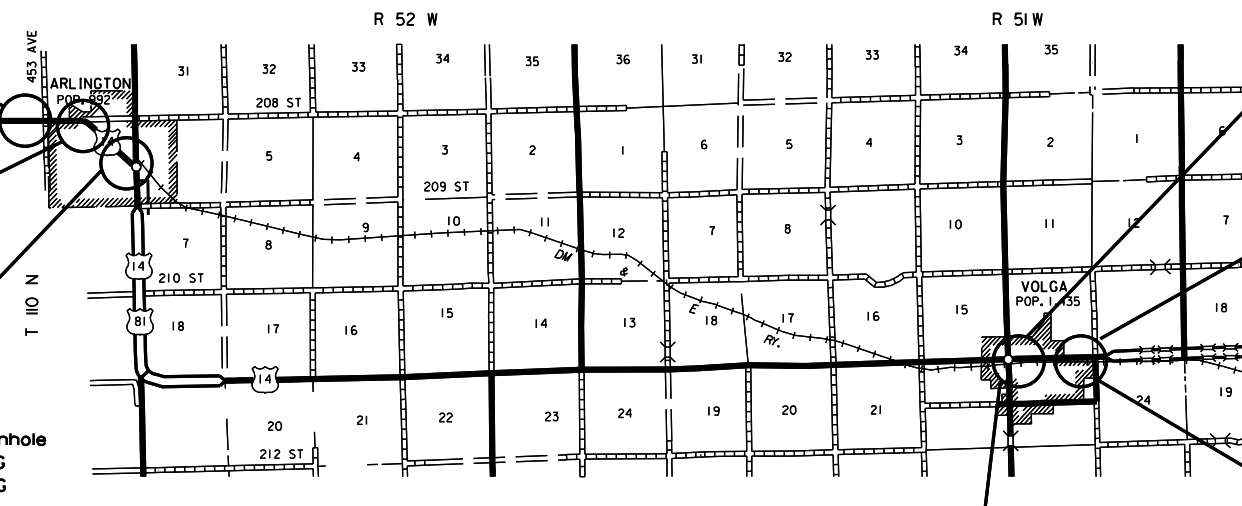


US Highway 14 @ Arlington and Volga

REPAIR AREA  
MRM 399.0467 WB, DL  
MRM 399.4950 WB, DL

REPAIR AREA  
MRM 399.6747 WB, DL  
MRM 399.7161 WB, DL  
MRM 399.8257 EB, DL  
MRM 399.8498 WB, DL  
MRM 399.9137 WB, DL  
MRM 399.9238 WB, DL  
MRM 400.0662 WB, DL  
MRM 400.1950 EB, DL  
MRM 400.2250 EB, DL

REPAIR AREA  
MRM 400.3790 WB, Manhole  
MRM 400.3885 WB C&G  
MRM 400.3926 WB C&G  
MRM 400.5041 EB, DL  
MRM 400.5127 EB, DL  
MRM 400.5886 EB, DL  
MRM 400.6841 EB, DL



REPAIR AREA  
MRM 412.9568 EB  
MRM 412.9759 EB  
MRM 413.072 WB, EB & TL  
MRM 413.1341 WB  
MRM 413.239 WB

REPAIR AREA  
MRM 413.4168 EB  
MRM 413.4505 EB  
MRM 413.4920 EB  
MRM 413.6262 WB  
MRM 413.6469 EB

REPAIR AREA  
MRM 413.1518 WB  
MRM 413.2127 WB  
MRM 413.2185 WB  
MRM 413.2720 WB

REPAIR AREA  
MRM 413.3177 WB  
MRM 413.3842 WB  
MRM 413.4673 WB  
MRM 413.4045 WB

STORM WATER PERMIT  
(None Required)

Legend:  
DL = Driving Lane  
PL = Passing Lane  
TL = Turn Lane  
EB = East Bound  
WB = West Bound  
NB = North Bound  
SB = South Bound

Arlington DESIGN DESIGNATION	
ADT (2024)	2535
ADT (2044)	3650
DHV	756
D	50%
T DHV	9.2%
T ADT	20.3%
V (Rural)	65 MPH
V (Urban)	30 MPH

Volga DESIGN DESIGNATION	
ADT (2024)	7199
ADT (2044)	10827
DHV	2243
D	50%
T DHV	4.7%
T ADT	10.3%
V (Rural)	65 MPH
V (Urban)	35 MPH

7

May 20, 2026

PLOTTED FROM - TRVAINT14

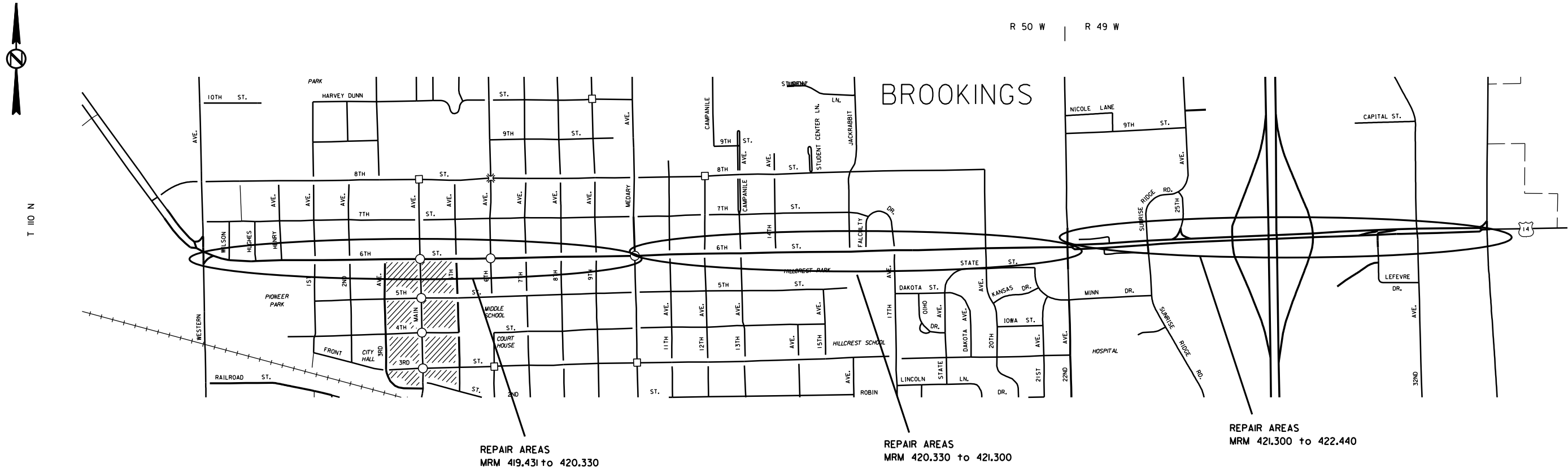
FILE - ... \0.0 DESIGN\TITLE-SHEETS.DGN SHEET - OF 30 SHEETS

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH-P 0012(330)	2	30

# PROJECT LAYOUT MAPS

## US Highway 14 @ Brookings

R 50 W | R 49 W



REPAIR AREAS  
MRM 419.431 to 420.330

REPAIR AREAS  
MRM 420.330 to 421.300

REPAIR AREAS  
MRM 421.300 to 422.440

Brookings  
DESIGN DESIGNATION

ADT (2024)	11621
ADT (2044)	16096
DHV	3335
D	50%
T DHV	0.6%
T ADT	1.4%
V	35 MPH

- Legend:
- DL = Driving Lane
  - PL = Passing Lane
  - TL = Turn Lane
  - EB = East Bound
  - WB = West Bound
  - NB = North Bound
  - SB = South Bound

# ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH-P 0012(330)	3	30

Revised 3-10-26 BRO

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E4100	Construction Schedule, Category I	Lump Sum	LS
110E1140	Remove Concrete Sidewalk	25.7	SqYd
320E1200	Asphalt Concrete Composite	5.0	Ton
380E5030	Nonreinforced PCC Pavement Repair	722.7	SqYd
380E6000	Dowel Bar	308	Each
380E6110	Insert Steel Bar in PCC Pavement	1,581	Each
380E6310	Seal Random Cracks in PCC Pavement	3,289	Ft
634E0010	Flagging	50.0	Hour
634E0110	Traffic Control Signs	440.8	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	8	Each
634E0420	Type C Advance Warning Arrow Board	4	Each
634E0640	Temporary Pavement Marking	1,280	Ft
634E2000	Longitudinal Pedestrian Barricade	12	Ft
634E2020	Temporary Curb Ramp	1	Each
650E9000	Repair Concrete Curb and/or Gutter	229	Ft
651E0060	6" Concrete Sidewalk	231	SqFt
670E1200	Type B Frame and Grate	8	Each
734E0010	Erosion Control	Lump Sum	LS
734E0845	Sediment Control at Inlet with Frame and Grate	4	Each
734E5010	Sweeping	20	Hour

## ENVIRONMENTAL COMMITMENTS

The SDDOT is committed to protecting the environment and uses Environmental Commitments as a communication tool for the Engineer and Contractor to ensure that attention is given to avoid, minimize, and/or mitigate an environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency with permitting authority can delay a project if identified environmental impacts have not been adequately addressed. Unless otherwise designated, the Contractor's primary contact regarding matters associated with these commitments will be the Project Engineer. During construction, the Project Engineer will verify that the Contractor has met Environmental Commitment requirements. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office.

Additional guidance on SDDOT's Environmental Commitments can be accessed through the Environmental Procedures Manual found at: <https://dot.sd.gov/media/documents/EnvironmentalProceduresManual.pdf> >

For questions regarding change orders in the field that may have an effect on an Environmental Commitment, the Project Engineer will contact the Environmental Engineer at 605-773-3180 or 605-773-4336 to determine whether an environmental analysis and/or resource agency coordination is necessary.

Once construction is complete, the Project Engineer will review all environmental commitments for the project and document their completion.

## COMMITMENT B: FEDERALLY THREATENED, ENDANGERED, AND PROTECTED SPECIES

### COMMITMENT B2: WHOOPING CRANE

The Whooping Crane is a spring and fall migratory bird in South Dakota that is about 5 feet tall and typically stops on wetlands, rivers, and agricultural lands along their migration route. An adult Whooping Crane is white with a red crown and a long, dark, pointed bill. Immature Whooping Cranes are cinnamon brown. While in flight, their long necks are kept straight and their long dark legs trail behind. Adult Whooping Cranes' black wing tips are visible during flight.

#### Action Taken/Required:

Harassment or other measures to cause the Whooping Crane to leave the site is a violation of the Endangered Species Act. If a Whooping Crane is sighted roosting in the vicinity of the project, borrow pits, or staging areas associated with the project, cease construction activities in the affected area until the Whooping Crane departs and immediately contact the Project Engineer. The Project Engineer will contact the Environmental Office so that the sighting can be reported to USFWS.

## COMMITMENT C: WATER SOURCE

The Contractor will not withdraw water with equipment previously used outside the State of South Dakota or previously used in aquatic invasive species (AIS) positive waters within South Dakota without prior approval from the SDDOT Environmental Office. To prevent and control the introduction and spread of invasive species into the project vicinity, all equipment will be power washed with hot water ( $\geq 140$  °F) and completely dried for a minimum of 7 days prior to subsequent use. South Dakota administrative rule 41:10:04:02 forbids the possession and transport of AIS; therefore, all attached dirt, mud, debris and vegetation must be removed and all compartments and tanks capable of holding standing water must be drained. This includes, but is not limited to, all equipment, pumps, lines, hoses and holding tanks.

#### Action Taken/Required:

The Contractor will obtain the necessary permits from the regulatory agencies such as the South Dakota Department of Agriculture and Natural Resources (SDDANR) and the United States Army Corps of Engineers (USACE) prior to water extraction activities.

Temporary permit to use public waters for highway construction purposes application can be found on the SDDANR website: <https://danr.sd.gov/OfficeOfWater/WaterRights/PermitForms/default.aspx>

Additional information and mapping of water sources impacted by Aquatic Invasive Species in South Dakota can be accessed at: <https://sdeastwanted.sd.gov/maps/default.aspx> >

South Dakota Administrative Rule 41:10:04 Aquatic Invasive Species: <https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04> >

## COMMITMENT E: STORM WATER

Construction activities constitute less than 1 acre of disturbance.

#### Action Taken/Required:

At a minimum and regardless of project size, appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH-P 0012(330)	4	30

**COMMITMENT H: WASTE DISPOSAL SITE**

The Contractor will furnish a site(s) for the disposal of construction and/or demolition debris generated by this project.

**Action Taken/Required:**

Construction and/or demolition debris may not be disposed of within the Public ROW.

The waste disposal site(s) will be managed and reclaimed in accordance with the following from the General Permit for Construction/Demolition Debris Disposal Under the South Dakota Waste Management Program issued by the Department of Agriculture and Natural Resources.

The waste disposal site(s) will not be located in a wetland, within 200 feet of surface water, or in an area that adversely affects wildlife, recreation, aesthetic value of an area, or any threatened or endangered species, as approved by the Environmental Office and the Project Engineer.

If the waste disposal site(s) is located such that it is within view of any ROW, the following additional requirements will apply:

1. Construction and/or demolition debris consisting of concrete, asphalt concrete, or other similar materials will be buried in a trench separate from wood debris. The final cover over the construction and/or demolition debris will consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the Public ROW will be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor will control the access to waste disposal sites not within the Public ROW with fences, gates, and placement of a sign or signs at the entrance to the site stating, "No Dumping Allowed".
2. Concrete and asphalt concrete debris may be stockpiled within view of the ROW for a period not to exceed the duration of the project. Prior to project completion, the waste will be removed from view of the ROW or buried, and the waste disposal site reclaimed as noted above.

The above requirements will not apply to waste disposal sites that are covered by an individual solid waste permit as specified in SDCL 34A-6-58, SDCL 34A-6-1.13, and ARSD 74:27:10:06.

Failure to comply with the requirements stated above may result in civil penalties in accordance with South Dakota Solid Waste Law, SDCL 34A-6-1.31.

All costs associated with furnishing waste disposal site(s), disposing of waste, maintaining control of access (fence, gates, and signs), and reclamation of the waste disposal site(s) will be incidental to the various contract items.

**COMMITMENT I: HISTORIC PRESERVATION OFFICE CLEARANCES**

State Historic Preservation Office (SHPO or THPO) concurrence has not been obtained for this project.

**Action Taken/Required:**

All earth disturbing activities require a cultural resource review prior to scheduling the pre-construction meeting. This work includes but is not limited to: Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas.

The Contractor will arrange and pay for a record search and when necessary, a cultural resource survey. The Contractor has the option to contact the state Archaeological Research Center (ARC) at 605-394-1936 or another qualified archaeologist, to obtain either a records search or a cultural resources survey. A record search might be sufficient for review if the site was previously surveyed; however, a cultural resources survey may need to be conducted by a qualified archaeologist.

The Contractor will provide ARC with the following: a topographical map or aerial view in which the site is clearly outlined, site dimensions, project number, and PCN. If applicable, provide evidence that the site has been previously disturbed by farming, mining, or construction activities with a landowner statement that artifacts have not been found on the site.

The Contractor will submit the cultural resources survey report to SDDOT Environmental Office, 700 East Broadway Avenue, Pierre, SD 57501-2586. SDDOT will submit the information to the appropriate SHPO/THPO. Allow **30 Days** from the date this information is submitted to the Environmental Engineer for SHPO/THPO review.

In the event of an inadvertent discovery of human remains, funerary objects, or if evidence of cultural resources is identified during project construction activities, then such activities within 100 feet of the inadvertent discovery will immediately cease and the Project Engineer will be immediately notified. The Project Engineer will contact the SDDOT Environmental Office, who will contact the appropriate SHPO/THPO within 48 hours of the discovery to determine an appropriate course of action.

The Contractor is responsible for obtaining any additional permits and clearances for Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas that affect wetlands, threatened and endangered species, or waterways. The Contractor will not utilize a site known or suspected of having contaminated soil or water. The Contractor will provide the required permits and clearances to the Project Engineer at the preconstruction meeting.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH-P 0012 ( 330 )	5	30

Revised BRO 3-6-26

### SCOPE OF WORK

Work on this project includes, but is not limited to, removal and replacement of non-reinforced concrete pavement.

### MAINTENANCE OF TRAFFIC

The Contractor will submit a traffic control and phasing plan for all repairs, a minimum of 1 week prior to the preconstruction meeting. The traffic control and phasing plan will be approved by the Engineer prior to starting any work on the project.

The traffic control and phasing plan will meet the following requirements:

- Reflectorized drums or Type 2 Barricades will be used to maintain a minimum of two-way traffic at intersecting roads or streets. The Contractor will mark and maintain alternating one-way access to businesses and residences along the project with cones, drums, or Type 1 Barricades. The Contractor will advise affected businesses before a restriction to the business is installed, as well as the anticipated duration of the restriction.
- Open repairs will not be permitted overnight.
- Construction debris will not be permitted within the ROW overnight.
- For 2 lane roadways, lanes may be reduced to one lane during working hours with the use of flaggers and pilot cars. During nighttime and non-working hours, every effort will be made to return traffic to the normal lane, unless the repair is located in the middle of the lane, in which case flagging will be required overnight.
- Work Zones may be up to 2,640 feet in length with a minimum of 2,000 feet between work zones. The maximum delay for a vehicle at a flagging station will not exceed 15 minutes.
- Sidewalk repairs will only be allowed on one side of the street at a time to allow for thru pedestrian access.
- Sidewalk repairs will only be allowed in one block increments to minimize the duration of pedestrian detour to the other side of the street.

The Contractor will accommodate over-width vehicles up to 16' through the work areas.

Locations of signs on traffic control layouts are diagrammatic. Portable stands may be used on the shoulders or on driving lanes closed to traffic if the duration is less than 3 days. If the duration is more than 3 days, the signs will be mounted on fixed location, ground mounted, breakaway supports. The bottom of signs on portable or temporary supports will not be less than seven feet above the pavement in urban areas and one foot above the pavement in rural areas.

Traffic Control at 3-lane segments will be as per Standard Plate 634.23 and at 5-lane segments will be as per Standard Plate 634.56, 634.57, or 634.60 as applicable. A maximum of two traffic control closures in 3-lane segments and two traffic control closures in 5-lane segments will be paid for. If more closures

are utilized, additional cost of signing will be at the Contractor's expense. No payment will be made for signs being reused at different repair areas.

Not more than four Type C Advanced Warning Arrow Panels will be measured and paid for.

The Contractor will be allowed to encroach on the traffic lane approximately 3 feet if FLAGGER signs and a flagger are used. The FLAGGER signs and flagging are included in the Estimate of Quantities.

Damage to the shoulders, median or ditch due to the Contractor's operations will be repaired by the Contractor, to the satisfaction of the Engineer, at no expense to the State. This includes the routing of traffic onto these shoulders around the work zones.

Type 3 Barricades 8' wide will protect PCC Pavement replacement during open excavation and concrete cure periods.

Open excavations at repair area locations will not be allowed to be left open overnight. The Contractor will complete the placement of PCCP on the same day as the existing PCCP is removed.

Maintenance of existing delineators will be the Contractor's responsibility.

Work activities during non-daylight hours are subject to prior approval.

All costs associated with furnishing and installing interim white and/or yellow edge line for a lane closure and/or for tapers and stop bars will be incidental to the contract unit price per foot for TEMPORARY PAVEMENT MARKING. Removal of interim white and/or yellow edge line for a lane closure will also be incidental to the contract unit price per foot for TEMPORARY PAVEMENT MARKING.

Portable sign supports will not be located on sidewalks, bicycle facilities, or other areas designated for pedestrian or bicycle traffic.

Flaggers and pilot car operators will all have radio or telephone contact with one another. This equipment is to be used to assist with traffic movement and in the event that an emergency vehicle needs to pass through the project in an expedient manner. All costs associated with this equipment will be incidental to the contract lump sum price for TRAFFIC CONTROL, MISCELLANEOUS.

### EXISTING PCC PAVEMENT

The existing pavement is Non-reinforced PCC Pavement.

Existing contraction joints are spaced at approximately 15 to 20'. Longitudinal joints are reinforced with No. 5 x 24" deformed tie bars spaced 30" to 48" center to center. Transverse joints are reinforced with 1 1/4" x 18" plain round dowel bars spaced 12" center to center.

The aggregate in the PCC Pavement is quartzite or granite.

### REMOVE CONCRETE PAVEMENT

Approximate locations of existing non-reinforced concrete pavement to be removed are provided in the table of PCCP Repair Areas. Prior to removal the

Contractor will saw cut full depth at the limits of the removal area as directed by the Engineer.

The Contractor will notify the Engineer two working days prior to beginning work at each location so the Engineer may mark out removal limits. The Engineer will mark exact dimensions prior to removal of concrete pavement. Payment will be made for quantity marked out and measured in the field. Variations from plans estimated quantities and/or locations will not be considered cause for re-negotiation of the contract unit prices.

Care will be exercised in the removal of concrete slab panels to avoid damage to adjacent pavement, manholes, and growth joints. Damage to adjacent pavement, manholes, and/or growth joints will be repaired to the satisfaction of the Engineer at the Contractor's expense.

After concrete or curb and gutter removal has been accomplished, the Contractor will shape, water and recompact the remaining granular material prior to placement of concrete or curb and gutter. Any additional gravel cushion required to prepare the area will be furnished and placed by the Contractor and will be incidental to the contract unit price per square yard for NONREINFORCED PCC PAVEMENT REPAIR.

Gravel cushion material will be from a Contractor furnished source. Water content and compaction will be to the satisfaction of the Engineer.

Removal of Concrete Pavement will be incidental to the contract unit bid price per square yard for NONREINFORCED PCC PAVEMENT REPAIR. This payment will be full compensation for full depth sawing, concrete breakout and removal of all PCC Pavement, disposal of all removed material, and all equipment, labor, and incidentals necessary to satisfactorily complete work.

All removed concrete will be removed from the right of way by the end of the workday and disposed of at the Contractor's waste disposal site.

The Contractor will take extra care in locations adjacent to existing block retaining wall, manholes, and vault lids. Existing block retaining wall, manholes, and vault lids will be removed and reset at the direction of the Engineer. Payment for removing and resetting block retaining wall, manhole frame and lids, and vault frames and lids will be incidental to various other project items.

### STEEL BAR INSTALLATION

The Contractor will install the steel bars (1 1/4 inch epoxy coated plain round dowel bars and No. 5 and No. 9 epoxy coated deformed tie bars) into drilled holes in the existing concrete pavement. An epoxy resin adhesive must be used to anchor the steel bar in the drilled hole.

Steel bars will not be placed closer than 6 inches to any longitudinal joint or pavement edge, not closer than 18 inches to any transverse joint, and not closer than 15 inches to any construction joint.

Concrete will be placed when the epoxy for anchoring the steel bars has hardened sufficiently to permit no movement of the steel bars as recommended by the manufacturer.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH-P 0012(330)	6	30

Revised BRO 3-6-26

### **NONREINFORCED PCC PAVEMENT REPAIR - GENERAL**

New pavement thickness will equal existing pavement thickness ( $T_N = T$ ).

Locations and size (length or width) of concrete repair areas are subject to change in the field, at the discretion of the Engineer, at no additional cost to the state. Payment will be based on actual area replaced.

Existing concrete pavement will be sawed full depth at the beginning and end of the NRCP repair areas. When either the beginning or end of a NRCP repair area falls close to an existing joint or crack, the NRCP repair area will be extended to eliminate the existing joint or crack. Where possible, new working joints will be adjacent to existing working joints.

Saw cuts that extend beyond the repair area will be minimized and filled with a non-shrinkage mortar mix at the Contractor's expense.

Existing concrete pavement in the replacement areas will be removed by the lift out method or by means that minimize damage to the base and sides of remaining in place concrete. Removed material will be removed from within the right-of-way by the end of the workday. Damage to adjacent concrete caused by the Contractor's operations will be removed and replaced at the Contractor's expense.

If the pavement replacement area is entirely on either side of the existing contraction joint, the location of one of the working joints will be at the original location. Any existing dowel bar assemblies/steel bars will be sawed off and removed.

At full roadway width repairs and when specified, a working joint will be reconstructed at both ends of each pavement replacement area as shown in these plans.

Concrete placed adjacent to asphalt concrete shoulders will be formed full depth to match the width of existing concrete pavement. Asphalt concrete shoulders adjacent to concrete pavement replacements will be repaired with new hot-mix asphalt concrete.

At repair locations where the new working joint is not opposite the existing working joint, the Contractor will place a 1/4" preformed asphalt expansion joint material along the longitudinal joint from the existing working joint to the new working joint. The expansion joint material will meet the requirements of AASHTO M33. Cost for this material will be incidental to the contract unit price per square yard for NONREINFORCED PCC PAVEMENT REPAIR.

The initial contraction joint sawing will be performed as soon as practical after placement to avoid random cracking.

Joints (longitudinal and transverse) through and around the repair areas will be sawed and sealed in accordance with the details shown in these plans.

### **NONREINFORCED PCC PAVEMENT REPAIR**

Concrete will meet the requirements stated in Section 380 of the specifications, except as modified by the following notes:

The fine aggregate will be screened over a one-inch square-opening screen just prior to introduction into the concrete paving mix if required by the Engineer.

The slump requirement will be limited to 3" maximum after water reducer is added and the concrete will contain 4.5% to 7.0% entrained air. The concrete will contain a minimum of 50% coarse aggregate by weight. Coarse aggregate will be crushed ledge rock, Size No. 1 unless an alternative gradation is approved by the Concrete Engineer as part of the mix design submittal. The mix design will contain at least 650 lbs of Type I or II cement or 600 lbs of Type III cement per cubic yard. The minimum 28 day compressive strength will be 4,000 psi. The Contractor is responsible for the mix design used. The Contractor will submit a mix design and supporting documentation for approval at least 2 weeks prior to use.

The use of a High Range water reducer at manufacturer's recommended dosage will be required.

Tie bars that require drilling holes and epoxy injection will be measured and paid for at the contract unit price per each for INSERT STEEL BAR IN PCC PAVEMENT.

Concrete will be cured with white pigmented curing compound (AASHTO M148, Type 2) applied as soon as practical at a rate of 125 square feet per gallon. Concrete will be cured for a minimum of 48 hours before opening to traffic. The 48 hours is based upon a concrete surface temperature of 60°F or higher throughout the cure period. If the concrete temperature falls below 60°F, the cure time will be extended, or other measures taken, at no additional cost to the State. A strength of 2,500 psi must be attained prior to opening to traffic.

Upon placement of the concrete, repair areas will be straight edged to ensure a smooth riding surface and will be textured longitudinally with the pavement by finishing with a stiff broom. Repair areas will then be checked with a 10' foot straight edge. The permissible longitudinal and transverse surface deviation will be 1/8" in 10'.

Concrete will be covered with suitable insulation blanket consisting of a layer of closed cell polystyrene foam protected by at least one layer of plastic. Insulation blanket will have an R-value of at least 0.5, as rated by the manufacturer. Insulation blanket will be left in place, except for joint sawing operations, until the 2,500 psi is attained. Insulation blanket will be overlapped on to the existing concrete by 4'. This requirement for covering repair areas with insulation blankets may be waived during periods of hot weather upon approval of the Engineer.

Cost for performing the aforementioned work including sawing and removing concrete, furnishing and placing concrete, sawing and sealing joints, repairing asphalt concrete shoulders, labor, tools and equipment will be included in the contract unit price per square yard for NONREINFORCED PCC PAVEMENT REPAIR.

### **REPAIR CONCRETE CURB AND GUTTER**

The existing concrete curb and gutter is Type B68 in Volga and Arlington and Type B69.5 in Brookings. New curb and gutter will match in place.

Refer to the repair tables and details for locations of removal and replacement. These locations will be designated by the Engineer on construction.

If the end of any section to be removed does not fall on an existing joint, a full depth sawed joint must be made to provide a vertical face for the new joint. Existing foundation material will be shaped and compacted to a firm, uniform bearing surface, conforming to the existing section or established grades as set by the Engineer. Unsuitable foundation material will be removed and replaced as directed.

Cost for labor, equipment, material and incidentals required for excavation and providing cushion material will be incidental to the contract unit prices for the various items.

Curb and Gutter will be tied to existing PCC pavement with drilled in No. 5 x 24" epoxy coated deformed tie bars spaced 30" center to center or by salvaged in place tie bars. Also, two No. 5 x 24" epoxy coated deformed tie bar will be drilled into the existing curb and gutter at each end of the replacement area. Refer to the notes for STEEL BAR INSTALLATION.

Cost for this work will be included in the contract unit price per each for INSERT STEEL BAR IN PCC PAVEMENT.

Concrete used for Concrete Curb and Gutter Repair will be either M6 Concrete mix or the same concrete mix used to complete Nonreinforced PCC Pavement Repair.

The Contractor will satisfactorily restore disturbed areas adjacent to the new concrete curb and gutter placement including removing and replacing topsoil to the satisfaction of the Engineer. Cost for this restoration work will be incidental to the contract unit prices for the various items.

Standard specifications for sawing, removing and replacing concrete curb and/or gutter, and material composition will apply except that the cost for such will be included in the contract unit price per foot for REPAIR CONCRETE CURB AND GUTTER.

### **DROP INLET FRAMES, GRATES, AND MANHOLE LIDS**

Existing drop inlet frames, grates, and manhole lids not designated for replacement may need to be salvaged and reset by the Contractor. Cost for this work will be incidental to the contract unit prices for the various items.

The Contractor will place additional resteel used adjacent to drop inlet frames and grates as shown on the "Layout for Repair Concrete Curb and/or Gutter Adjacent to Drop Inlet". All cost for this additional resteel work will be incidental to the contract unit prices for the various items.

### **CONCRETE SIDEWALK**

Concrete Sidewalk Repairs will only be allowed on one side of the street at a time.

Concrete Sidewalk Repairs will only be allowed in one block increments.

Installation of 1" Preformed Expansion Joint Filler will be required when Sidewalk is placed adjacent to concrete or retaining wall.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH-P 0012(330)	7	30

Revised BRO 3-6-26

### CONCRETE SIDEWALK (Continued)

The Contractor will satisfactorily restore disturbed areas adjacent to the new concrete sidewalk placement including removing and replacing topsoil to the satisfaction of the Engineer. Cost for this restoration work will be incidental to the contract unit prices for the various items.

Cost for furnishing and installing preformed expansion joint material, furnishing and placing concrete sidewalk, repairing asphalt concrete parking areas, labor, tools and equipment will be included in the contract unit price per square foot for 6" CONCRETE SIDEWALK.

### ASPHALT CONCRETE COMPOSITE

To allow for form placement at locations where full depth repairs are adjacent to asphalt concrete shoulders or parking lots, the Contractor will saw cut full depth existing asphalt concrete. The saw cut will be parallel to and no more than one foot from existing pavement edge. All costs incurred in performing the above-mentioned work, and for equipment, labor, and incidentals necessary to complete work will be incidental to the contract unit price per ton for ASPHALT CONCRETE COMPOSITE.

Upon completion of pavement repair, the Contractor will re-establish the asphalt concrete. Asphalt Concrete Composite will be placed at a depth that matches that of the existing asphalt concrete. All costs for furnishing and installing granular material, for Asphalt Concrete Composite, and for all equipment, labor, and incidentals necessary to complete work will be incidental to the contract unit price per ton for ASPHALT CONCRETE COMPOSITE.

All other requirements in the specifications for Asphalt Concrete Composite will apply.

### JOINT SEALANT FOR NONREINFORCED PCC PAVEMENT REPAIR

Low Modulus Silicone Sealant may be used in place of Hot Poured Elastic Joint Sealer on any Longitudinal or Transverse Joint for PCC Pavement Repair Areas. Details have been included to seal the transverse joints with either silicone or hot pour. The contractor has the option to use either hot pour or silicone detail for sealing transverse joints.

Existing joints at Arlington and Volga are sealed with Low Modulus Silicone Sealant. Existing joints in Brookings are sealed with Hot Poured Elastic Joint Sealer.

### SEALING RANDOM CRACKS IN PCC PAVEMENT

Random cracks will be repaired in accordance with the detail for Sealing Random Cracks In Concrete Pavement. Reservoir dimensions may vary slightly from the details, due to the nature of this operation. However, any variance due to Contractor negligence will be repaired at the Contractor's expense.

Only those Random Cracks in the existing concrete pavement with joints that are open and accept water and incompressibles as selected by the Engineer will be prepared and sealed with hot poured elastic sealant. Each random crack will be routed and the joint and roadway surface immediately cleaned by flushing with water or compressed air. The use of a concrete saw to route the

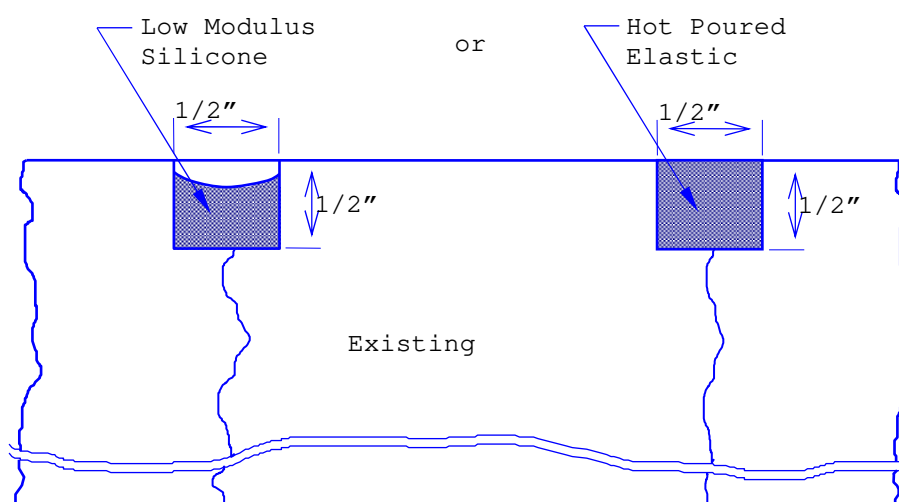
crack will not be allowed. If there is any existing joint filler remaining in the cracks following routing, it will be satisfactorily removed prior to sealing. Just prior to sealing, the sides of the routed crack will be cleaned by sandblasting and the routed reservoir blown clean with compressed air.

The sealant will be placed in the routed reservoir with equipment and by methods that insure complete and uniform filling. Backer rod may be used in wider random cracks. Sealing Random Cracks in PCC Pavement will be measured to the nearest 0.1 foot of random cracks sealed and accepted on the project.

Low Modulus Silicone Sealant may be used in place of Hot Poured Elastic Joint Sealer on any Longitudinal or Transverse Joint for Sealing Random Cracks in PCC Pavement. Details have been included to seal the transverse joints with either silicone or hot pour. The contractor has the option to use either hot pour or silicone detail for sealing transverse joints.

All costs for routing and sealing random cracks will be incidental to the contract unit price per foot for SEAL RANDOM CRACKS IN PCC PAVEMENT.

### SEALING RANDOM CRACKS IN PCC PAVEMENT DETAIL



### TEMPORARY PEDESTRIAN ACCESS ROUTE

A Temporary Pedestrian Access Route (TPAR) will be provided when crosswalks, sidewalks, or other pedestrian facilities are blocked, closed, or relocated. A TPAR may consist of a combination of existing and/or temporary pedestrian facilities. The TPAR will be kept free of any obstructions and hazards, such as holes, debris, mud, snow, construction equipment, traffic control signing, stored materials, etc.

The Contractor will notify the Engineer at least 72 hours prior to start of any construction operation that will necessitate a change in pedestrian access. Pedestrian traffic signal displays controlling a crosswalk that is closed will be covered or removed.

### TEMPORARY CURB RAMP

Temporary curb ramps should be firm, stable, and have a non-slip surface. They will not warp or buckle, and should be made of materials strong enough to support a weight of 800 pounds. Temporary curb ramps will be yellow or color contrasting and contain marked edges, so they are noticeable by pedestrians who have visual impairments. Lateral joints or gaps between surfaces will be a maximum of 0.5 inches in width. Temporary curb ramps will include detectable warning panels.

Temporary curb ramps will be the same width as the temporary pedestrian access route, with a recommended width of 60 inches and a minimum width of 48 inches. Temporary curb ramps will have a maximum slope of 8.3% and have free draining surfaces with a maximum cross slope of 2%. Handrails on temporary curb ramps are not required unless the curb ramp has a rise exceeding 6 inches and a length exceeding 72 inches.

All costs will be incidental to the contract unit price per each for TEMPORARY CURB RAMP.

### LONGITUDINAL PEDESTRIAN BARRICADE

Longitudinal pedestrian barricades should not be used to provide positive protection for pedestrians.

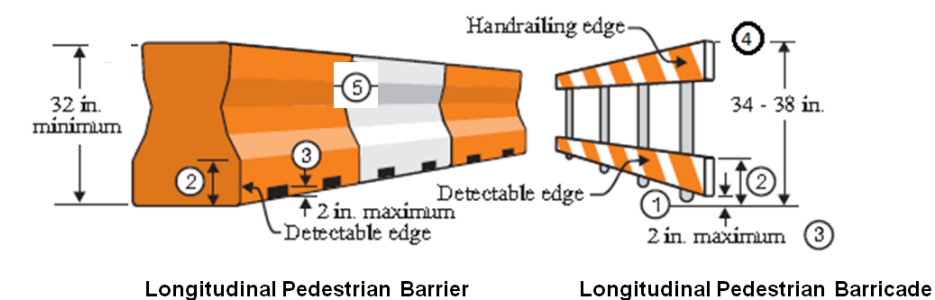
To prevent any tripping hazard to pedestrians, ballast will be located behind or internal to the device.

When longitudinal pedestrian barricades are combined in a series, the maximum gap between devices that do not interlock will be one inch. Joints between devices that do interlock will be closed and flush to prevent canes or small wheels from being trapped and to facilitate safe hand trailing. When used as a sidewalk closure mechanism, longitudinal pedestrian barricade must run the entire width of the sidewalk. Longitudinal pedestrian barricade should provide a color contrasting pattern. Black should not be used to color any base on a device. The devices should comply with the general color and stripe pattern requirements of Section 6F.68 of the MUTCD.

Longitudinal pedestrian barricade will have continuous bottom and top surfaces. The top surface will be smooth to allow safe hand trailing. Both upper and lower surfaces will share a common vertical plane.

All costs will be incidental to the contract unit price per foot for LONGITUDINAL PEDESTRIAN BARRICADE.

### PEDESTRIAN CHANNELIZING DEVICE DETAILS



1. Barricade rail supports may not extend into the pedestrian walkway more than 4 inches from the face of the barricade.

### PEDESTRIAN CHANNELIZING DEVICE DETAILS (Continued)

- The top edge of the bottom portion will be a minimum of 8 inches above the walkway.
- Devices will not block water drainage from the walkway. A gap height or opening from the walkway surface up to a maximum of 2 inches in height is allowed for drainage purposes.
- The top edge of the longitudinal pedestrian barricade is to be used as a guiderail to provide visual and tactile guidance to pedestrians along a designated route. The top surface should have a minimum width of 0.5 inches to allow the hand to feel the surface. The surface should be smooth and free of any sharp or abrasive elements to allow safe hand trailing.
- Longitudinal pedestrian barrier used to provide positive protection from traffic to pedestrians should be crashworthy.

- A minimum clear space of 48 inch x 48 inch minimum will be provided above and below the curb ramp, with a 60 inch x 60 inch clear space preferred.
- The curb ramp walkway edge will be marked with a contrasting color 2 to 4 inch wide marking. The marking is optional where color contrasting edging is used.
- Water flow in the gutter system will have minimal restriction.
- Lateral joints or gaps between surfaces will be less than 0.5 inches in width.
- Changes between surface heights should not exceed 0.5 inches. Lateral edges between 0.25 inches and 0.5 inches in height, should be vertical up to 0.25 inches in height and beveled at 2:1 between 0.25 inches and 0.5 inches in height.

Dandy Curb Sack and Dandy Curb Bag for curb inlets.  
Dandy Bag, Dandy Sack, and Dandy Pop for median drains.

Dandy Products Inc.  
Dublin, OH  
Phone: 1-800-591-2284  
[www.dandyproducts.com](http://www.dandyproducts.com)

Silt Trapper

Storm Water Solutions  
Lakeville, MN  
Phone: 1-952-461-4376  
[www.siltrapper.com](http://www.siltrapper.com)

DIP Basket

Skyview Construction Co., LLC  
Waubay, SD  
Phone: 1-605-520-0555  
[www.skyviewconst.com](http://www.skyviewconst.com)

FLEXSTORM Inlet Filters

Inlet and Pipe Protection, Inc.  
Naperville, IL  
Phone: 1-866-287-8655  
[www.inletfilters.com](http://www.inletfilters.com)

GR-8 Guard  
or  
Combo Guard

ERTEC Environmental Systems LLC  
Alameda, CA  
Phone: 1-866-521-0724  
[www.ertecsystems.com](http://www.ertecsystems.com)

Sediment Catchers

Shaun Jensen  
Brookings, SD  
Phone: 1-605-690-4950

Grate FX, Slammer, or VertiPro

Enviroscape ECM, Ltd.  
Oakwood, OH  
Phone: 1-419-594-3210  
[www.strawblanket.com](http://www.strawblanket.com)

BX Inlet Sediment Boxes

BX Civil and Construction  
Dell Rapids, SD  
Phone: 1-605-428-5483  
[bx-cc.com](http://bx-cc.com)

EZ-Flo and EZ-Catch

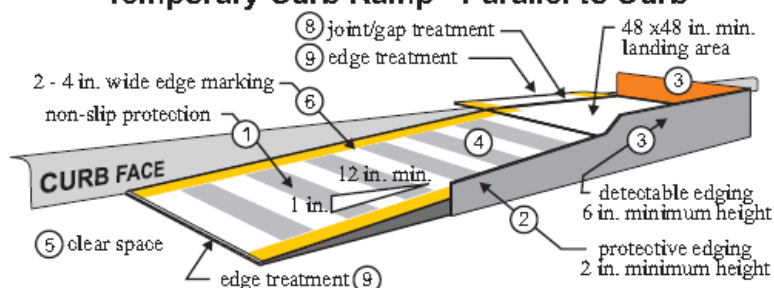
Flo-Water, LLC  
West Des Moines, IA  
Phone: 1-515-577-6763  
[www.flo-water.net](http://www.flo-water.net)

Basin Bag

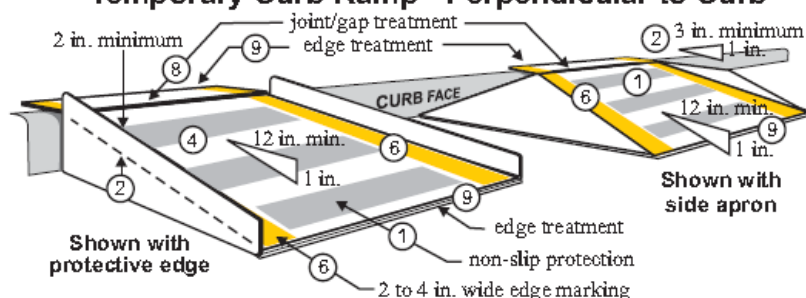
Pro Drain Systems, Inc.  
Highland, MI  
Phone: 1-248-329-7001  
[www.prodrainsystems.com](http://www.prodrainsystems.com)

### TEMPORARY CURB RAMP DETAILS

#### Temporary Curb Ramp - Parallel to Curb



#### Temporary Curb Ramp - Perpendicular to Curb



- Curb ramps will be 48-inch minimum width with a firm, stable, and non-slip surface.
- Protective edging with a 2-inch minimum height will be installed when the curb ramp or landing platform has a vertical drop of 6 inches or greater or has a side apron slope steeper than 33:1 (33%). Protective edging should be considered when curb ramps or landing platforms have a vertical drop of 3 inches or more.
- Detectable edging with 6 inches minimum height and contrasting color will be installed on all curb ramp landings where the walkway changes direction (turns).
- Curb ramps and landings should have a 50:1 (2%) maximum cross slope.

### SEDIMENT CONTROL AT INLETS WITH FRAMES AND GRATES

This type of sediment control device should be used where there is pavement in the vicinity of the drop inlets and storm water or sediment could possibly enter the frame and grate. Sediment Control at Inlet with Frame and Grate will be installed prior to working around the drop inlets.

The Contractor will be responsible for maintaining and repairing the sediment control devices for the duration of the project for which sediment control measures are required. Maintenance will be scheduled to prevent storm water from backing up into the driving lane.

“Sediment Control at Inlet with Frame and Grate” will be paid for one time at each location, regardless of the number of times the sediment control devices are installed, inspected, cleaned, removed, repaired, or replaced. All costs associated with furnishing, installing, inspecting, maintaining, cleaning, sediment removal, and repairing Sediment Control at Inlet with Frame and Grate will be incidental to the contract unit price per each for “Sediment Control at Inlet with Frame and Grate”.

Sediment collection devices will be:

A sediment control device as shown on Standard Plate 734.10. Filter fabric used for constructing the sediment control at inlets with frames and grates will be the same type of fabric that is used in high flow silt fence from the approved product list. The approved product list may be viewed at the following internet site:

<http://sddot.com/business/certification/products/Default.aspx>

#### Sediment Control at Inlet with Frame and Grate Approved List:

Product	Manufacturer
InfraSafe Debris Collection Device with filter sock	Royal Environmental Systems, Inc. Stacy, MN Phone: 1-800-817-3240 <a href="http://www.royalenterprises.net">www.royalenterprises.net</a>

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH-P 0012(330)	9	30

**STREET SWEEPING**

Vehicle tracking of sediment from the construction site will be minimized. Street sweeping will be used if erosion and sediment control best management practices are not adequate to prevent sediment from being tracked onto the street.

The Contractor will use a pickup broom having integral self-contained storage to clean the roadway. The pickup broom used will be a minimum of 6 feet wide and have working gutter brooms.

At a minimum, sweeping will be required:

1. Prior to opening any segment or roadway to traffic.
2. When sawing operations are underway in the inside driving lanes, the outside driving lanes and gutter may need to be swept to control dust.

All costs for cleaning the roadway with a pickup broom will be incidental to the contract unit price per hour for SWEEPING.

**EROSION CONTROL**

The estimated area requiring erosion control is 500 square feet. All costs for the erosion control work for reshaping topsoil, furnishing, placing, and maintaining erosion control including equipment, labor, and seeding Type D Permanent Seed Mixture will be incidental to the contract lump sum price for EROSION CONTROL.

The limits of erosion control work will be determined by the Engineer during construction.

Type D Permanent Seed Mixture will consist of the following:

Grass Species	Variety	Pure Live Seed (PLS) (Pounds/1000 SqFt)
Kentucky Bluegrass	Avalanche, Appalachian, Wildhorse, Blue Bonnet, Action	1.4
Perennial Ryegrass	Turf Type Varieties	1.4
Creeping Red Fescue	Epic, Boreal, Chantilly	1.4
Chewings Fescue	Ambrose, K2, Zodiac, Shadow III	1.4
Alkali Grass	Fults, Fults II, Quill, Salty	1.4
Total:		7





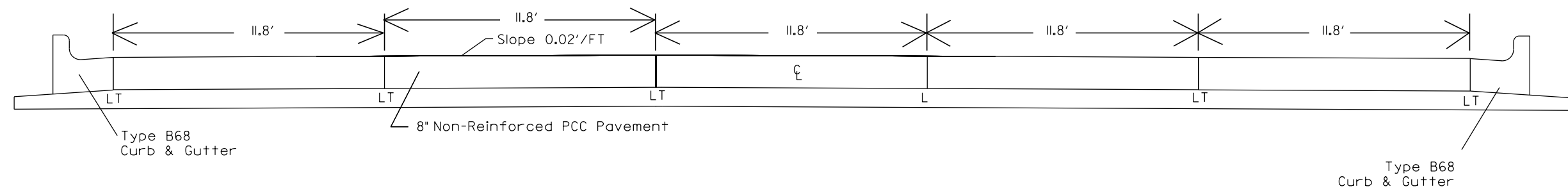
## TABLE OF SEAL RANDOM CRACKS IN PCC PAVEMENT

US 14 @ Brookings				US 14 @ Brookings				US 14 @ Volga			
MRM	Location	Length (FT)	Comment	MRM	Location	Length (FT)	Comment	MRM	Location	Length (FT)	Comment
419.4655	WB DL	94	Longitudinal	421.4883	EB RHTL Int	14	Transverse	412.9568	EB	14	Transverse
419.4806	WB DL & PL & TL	53	Transverse	421.6464	WB DL	45	Longitudinal	412.9759	EB	14	Transverse
419.5033	WB DL	65	Longitudinal	421.6480	WB DL	12	Longitudinal	413.072	EB,WB,TL	60	Transverse
419.5242	WB DL	73	Longitudinal	422.0745	WB DL	27	Longitudinal	413.1341	WB	24	Longitudinal
419.5592	WB DL	104	Longitudinal	422.2517	WB Int	10	Transverse	413.239	WB	24	Longitudinal
419.5602	WB DL	45	Longitudinal	422.4050	WB DL Int	24	Longitudinal	413.4168	EB	48	Longitudinal
419.6975	EBL-Right turn	16	Transverse	420.7251	EB PL	20	Longitudinal	413.4505	EB	24	Longitudinal
419.7291	EB DL	60	Longitudinal	420.7285	EB PL	11	Transverse	413.492	EB	24	Longitudinal
419.7556	EB DL	70	Longitudinal	420.7287	EB DL	32	Trans & Long	413.6262	WB	24	Longitudinal
419.8298	EB DL	46	Trans & Long	420.7361	EB DL	43	Longitudinal	413.6469	EB	24	Longitudinal
419.8298	EB PL	17	Trans & Long	420.7375	WB	6	At entrance			280	ft
419.8401	TL	12	Transverse	420.7603	EB DL	32	Trans & Long				
419.8577	EB DL & PL	60	Long & Trans	420.7613	EB PL	11	Transverse				
419.8624	WB DL	33	Longitudinal	420.7842	EB DL	20	Trans & Long				
419.8708	WB DL	39	Longitudinal	420.7855	EB DL	30	Trans & Long				
419.8825	EB DL	116	Longitudinal	420.7965	EB PL	14	Longitudinal				
419.8825	EB PL	10	Transverse	420.8092	EB DL	13	Longitudinal	399.0467	WB	12	Transverse
419.9488	EB DL	100	Long & Trans	420.8392	TL	3	Longitudinal	399.4950	WB	4	Longitudinal
420.0094	EB DL	75	Long & Trans	420.8613	EB DL	32	Long & Trans	399.6435	WB	4	Longitudinal
420.1155	EB DL	67	Long & Trans	420.8814	WB DL	2	In Gutter	399.6747	WB	24	Longitudinal
420.1342	EB DL & PL	18	Trans & Long	420.889	TL	15	Intersection	399.7161	WB	4	Longitudinal
420.1704	EB DL	28	Longitudinal	420.9496	TL	2	Longitudinal	399.8257	EB	13	Transverse
420.2139	EB DL	140	Long & Trans	420.9631	TL	2	Longitudinal	399.8498	WB	4	Longitudinal
420.2139	EB PL	22	Trans & Long	421.0246	WB DL	22	Longitudinal	399.9137	WB	4	Longitudinal
420.3744	TL	400	Longitudinal	421.0394	TL	11	At Manhole	399.9238	WB	4	Longitudinal
420.4759	WB PL	12	Transverse	421.077	EB PL	6	Transverse	400.0662	WB	14	Longitudinal
420.5301	TL	6	At Manhole	421.0911	TL	2	Transverse	400.1950	EB	226	Longitudinal
420.5804	EB DL	42	Longitudinal	421.0955	TL	16	At Manhole	400.2250	EB	116	Longitudinal
420.6861	EB DL	12	Transverse	421.1051	WB CW	51	Longitudinal	400.5041	EB	8	Longitudinal
420.723	EB DL	13	Transverse	421.1094	EB DL&PL	4	Longitudinal	400.6841	EB	12	Transverse
		1848	ft	421.1598	WB DL	36	Longitudinal			449	ft
				421.1599	EB PL	7	Transverse				
				421.2167	WB PL	3	Transverse				
				421.2331	WB PL	30	Longitudinal				
				421.2618	EB RHTL	40	In Gutter				
				421.3226	EB RHTL	40	Longitudinal				
				421.3423	EB PL	24	Intersection				
						712	ft				
				<b>Grand Total</b>		<b>3,289</b>	<b>ft</b>				

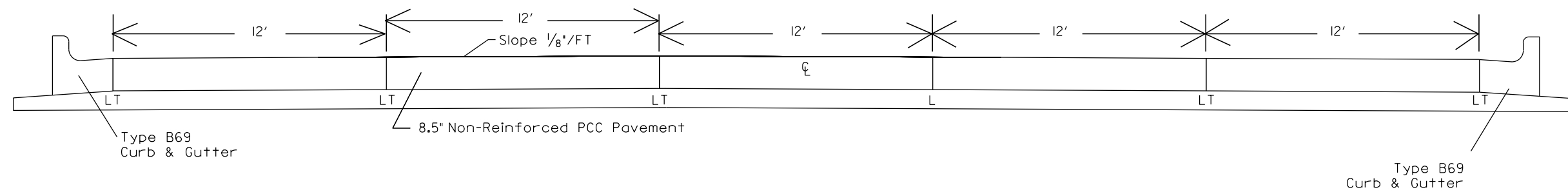
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH-P 0012(330)	13	30

# TYPICAL SECTIONS

## US HIGHWAY 14 MAINLINE IN PLACE SURFACING SECTION (Urban - Volga)



## US HIGHWAY 14 MAINLINE IN PLACE SURFACING SECTION (Urban - Arlington)



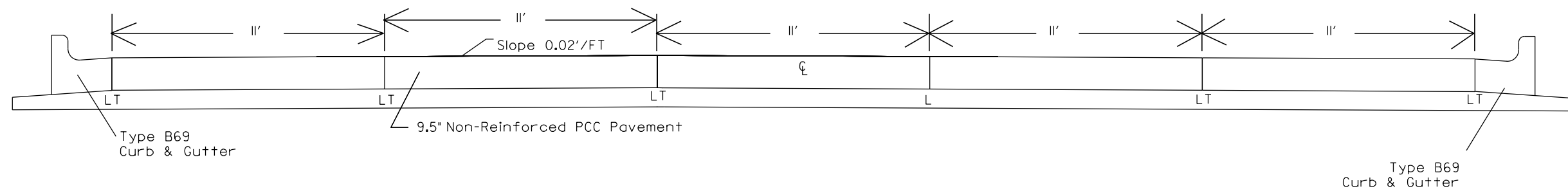
### LEGEND

L - Joint does not include rebar tie  
LT - Joint includes rebar tie

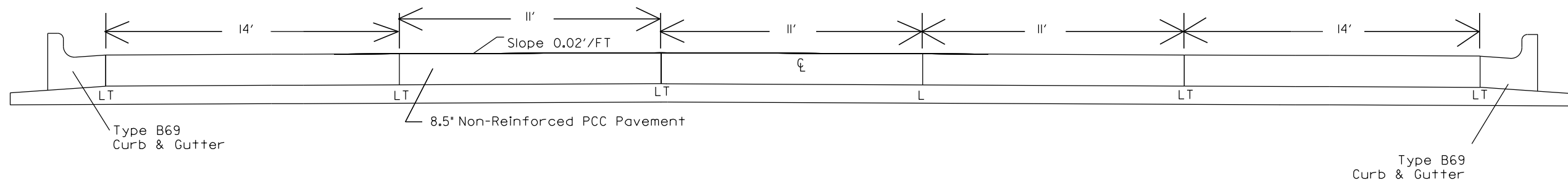
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH-P 0012(330)	14	30

# TYPICAL SECTIONS

US HIGHWAY 14 MAINLINE  
IN PLACE SURFACING SECTION  
(Urban - Brookings MRM 420.33 to 422.44)



US HIGHWAY 14 MAINLINE  
IN PLACE SURFACING SECTION  
(Urban - Brookings MRM 419.57 to 420.33)

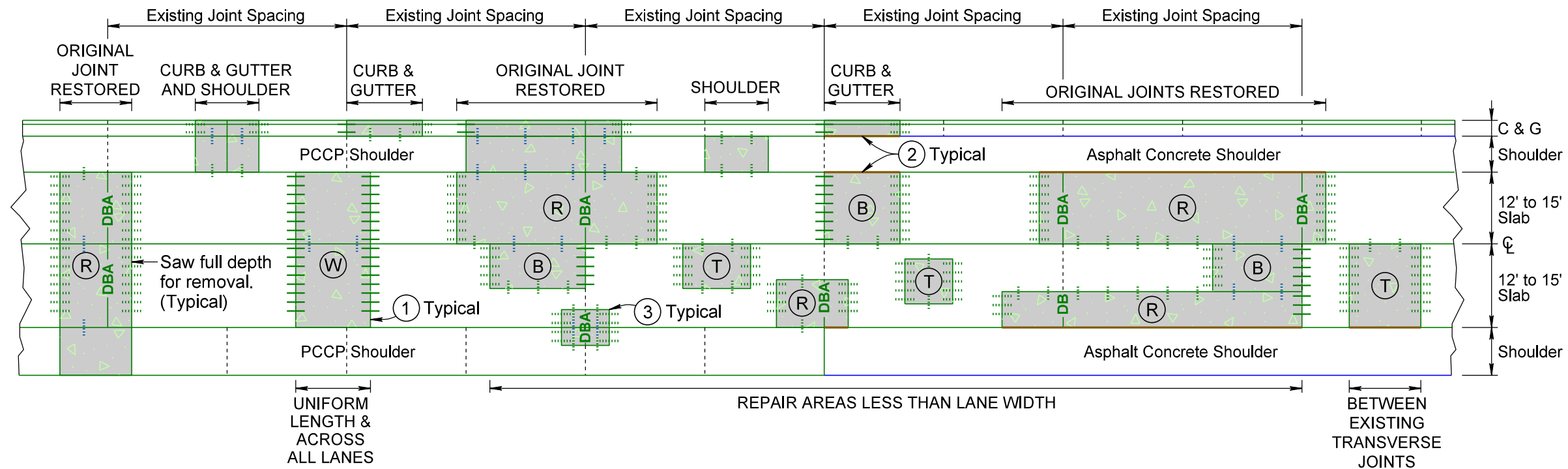


### LEGEND

L - Joint does not include rebar tie  
LT - Joint includes rebar tie

# NONREINFORCED PCC PAVEMENT REPAIR

## UP TO TWO LANE ROADWAY OR UP TO FOUR LANE DIVIDED ROADWAY TYPICAL REPAIR AREAS



**KEY:**

PCC Pavement Repair Area

**PCC PAVEMENT REPAIR AREA TYPES:**

- (W) Two Working Joints (Use only if repair is full roadway width and uniform length (across all lanes))
- (T) Two Tied Joints
- (B) One Working & One Tied Joint
- (R) Two Tied Joints with Original Joint Restored with Dowel Bar Assembly

**Steel Bars for Transverse Joints**

Pavement Thickness  $\geq 10.5"$

— Drilled in  $1\frac{1}{2}"$  x 18" epoxy coated plain round dowel bars spaced 18" center to center.

..... Drilled in No. 11 x 18" epoxy coated deformed tie bars spaced 18" center to center.

Pavement Thickness  $\geq 8.5"$  and  $< 10.5"$

— Drilled in  $1\frac{1}{4}"$  x 18" epoxy coated plain round dowel bars spaced 18" center to center.

..... Drilled in No. 9 x 18" epoxy coated deformed tie bars spaced 18" center to center.

Pavement Thickness  $< 8.5"$

— Drilled in 1" x 18" epoxy coated plain round dowel bars spaced 18" center to center.

..... Drilled in No. 8 x 18" epoxy coated deformed tie bars spaced 18" center to center.

DBA Dowel Bar Assembly

**Steel Bars for Longitudinal Joints**

..... No. 5 x 30" epoxy coated deformed tie bars. Sawn Joint - spaced 48" center to center. Construction Joint - spaced 48" center to center.

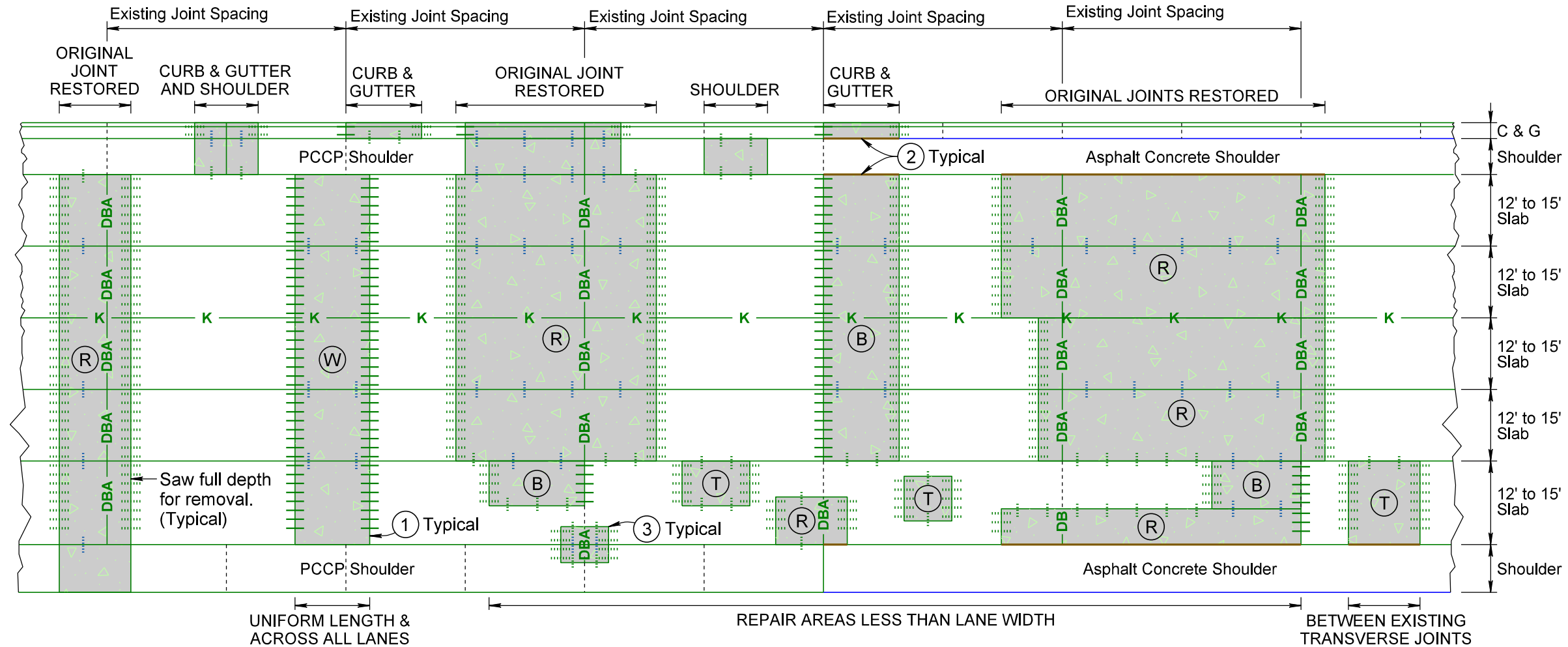
..... No. 5 x 24" epoxy coated deformed tie bars. Drilled In - spaced 30" center to center.

**NOTES:** Saw around repair areas full depth for removal.

- ① Where possible, transverse joints will be constructed/maintained full roadway width.
- ② Edges of repair areas will be formed to match the width of the existing concrete pavement.
- ③ Need for bars in small repair areas on/near the shoulder to be determined on a case-by-case basis, on construction by the Engineer.

# NONREINFORCED PCC PAVEMENT REPAIR

UP TO FOUR LANE ROADWAY WITH CENTER TURN LANE  
TYPICAL REPAIR AREAS



**KEY:**

PCC Pavement Repair Area

**PCC PAVEMENT REPAIR AREA TYPES:**

- (W) Two Working Joints (Use only if repair is full roadway width and uniform length (across all lanes))
- (T) Two Tied Joints
- (B) One Working & One Tied Joint
- (R) Two Tied Joints with Original Joint Restored with Dowel Bar Assembly

Longitudinal Keyway Joints Without Bars

— K — Where a repair area intersects an existing longitudinal keyway joint without tie bars, the newly constructed joint should also be a keyway without tie bars.

Steel Bars for Transverse Joints

Pavement Thickness  $\geq 10.5"$

— Drilled in  $1\frac{1}{2}"$  x 18" epoxy coated plain round dowel bars spaced 18" center to center.

..... Drilled in No. 11 x 18" epoxy coated deformed tie bars spaced 18" center to center.

Pavement Thickness  $\geq 8.5"$  and  $< 10.5"$

— Drilled in  $1\frac{1}{4}"$  x 18" epoxy coated plain round dowel bars spaced 18" center to center.

..... Drilled in No. 9 x 18" epoxy coated deformed tie bars spaced 18" center to center.

Pavement Thickness  $< 8.5"$

— Drilled in 1" x 18" epoxy coated plain round dowel bars spaced 18" center to center.

..... Drilled in No. 8 x 18" epoxy coated deformed tie bars spaced 18" center to center.

DBA Dowel Bar Assembly

Steel Bars for Longitudinal Joints

..... No. 5 x 30" epoxy coated deformed tie bars. Sawn Joint - spaced 48" center to center. Construction Joint - spaced 48" center to center.

..... No. 5 x 24" epoxy coated deformed tie bars. Drilled In - spaced 30" center to center.

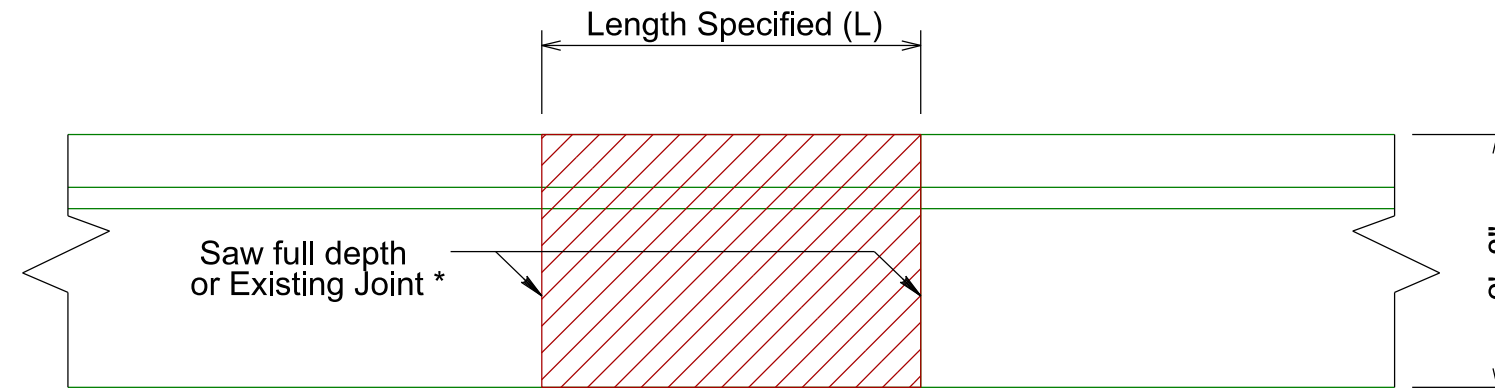
**NOTES:** Saw around repair areas full depth for removal.

- (1) Where possible, transverse joints will be constructed/maintained full roadway width.
- (2) Edges of repair areas will be formed to match the width of the existing concrete pavement.
- (3) Need for bars in small repair areas on/near the shoulder to be determined on a case-by-case basis, on construction by the Engineer.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH-P 0012(330)	17	30

# REPAIR CONCRETE CURB AND/OR GUTTER

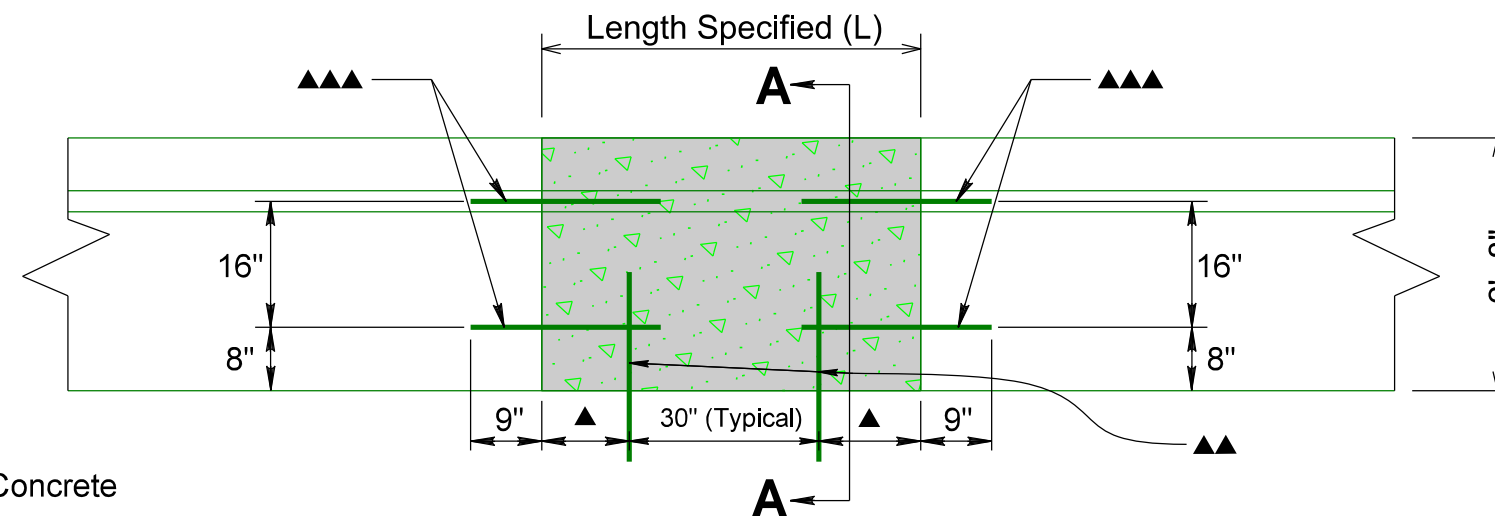
## REMOVAL




 Remove Concrete Curb and/or Gutter

\* If sawing is required, the cost will be incidental to the contract unit price per foot for Repair Concrete Curb and/or Gutter.

## INSTALLATION



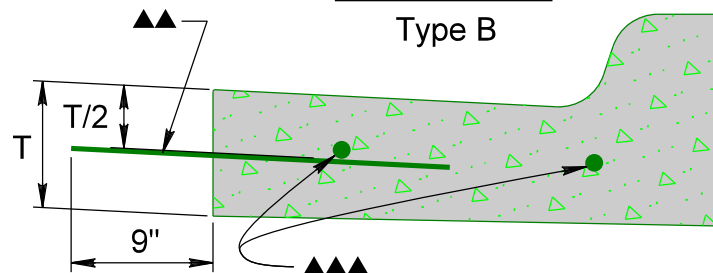
 Class M6 Concrete

- ▲ 9" Minimum  
23" Maximum
- ▲▲ No. 5 x 24" Epoxy Coated Deformed Tie Bar Drilled 9" into in place pavement \*\*
- ▲▲▲ No. 5 x 24" Epoxy Coated Deformed Tie Bar Drilled 9" into in place curb & gutter \*\*

See standard plate(s) for Type B, D or F Concrete Curb and Gutter and Type P Concrete Gutter for construction and forming details.

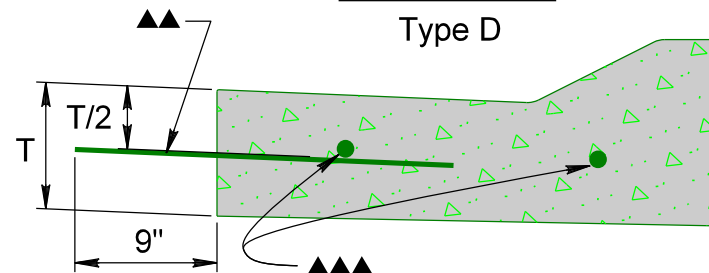
### Sec. A-A

Type B



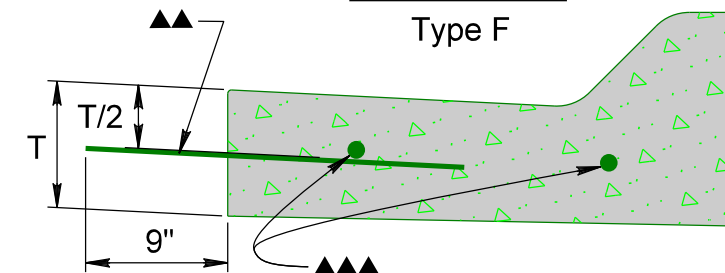
### Sec. A-A

Type D



### Sec. A-A

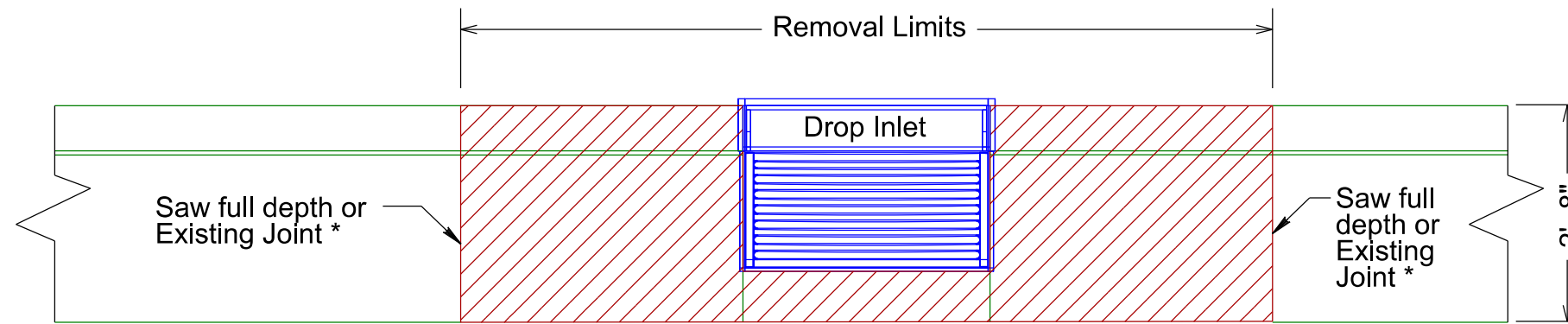
Type F



\*\* Cost for this work will be included in the contract unit price per each for Insert Steel Bar in PCC Pavement.  
Maintain 2" clear cover on all rebar.

# LAYOUT FOR REPAIR CONCRETE CURB AND/OR GUTTER ADJACENT TO DROP INLET

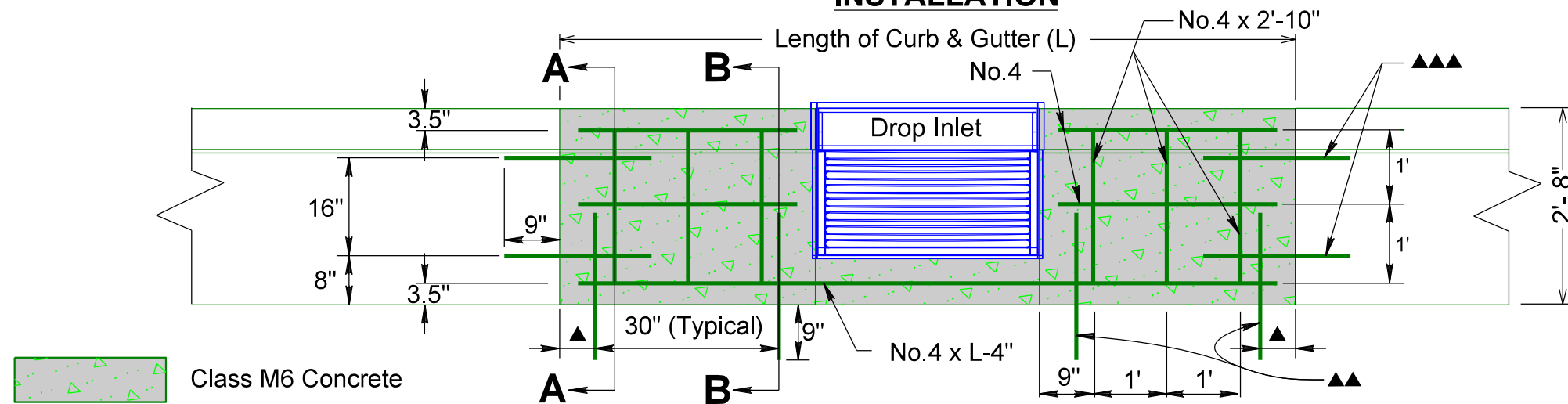
## REMOVAL



Remove Concrete Curb and/or Gutter

\* If sawing is required, the cost will be incidental to the contract unit price per foot for Repair Concrete Curb and/or Gutter.

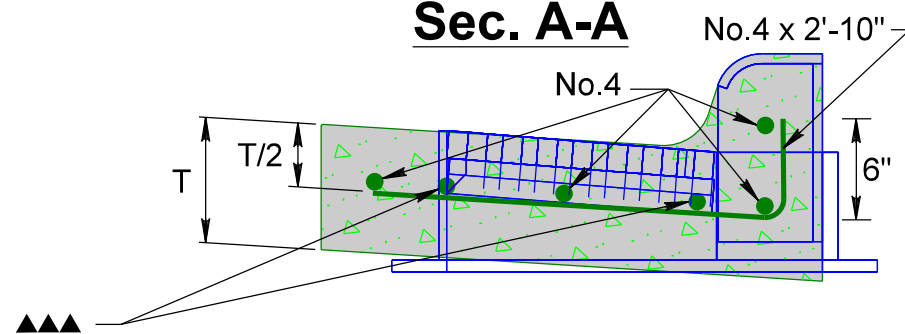
## INSTALLATION



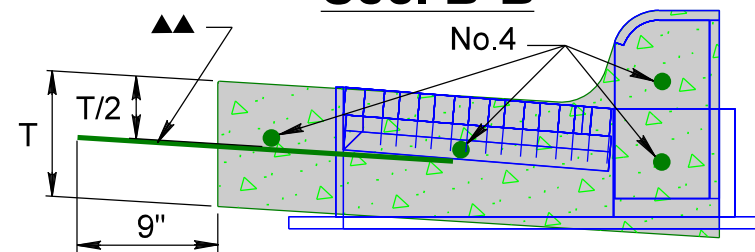
Class M6 Concrete

- ▲ 9" Minimum  
23" Maximum
- ▲▲ No. 5 x 24" Epoxy Coated Deformed Tie Bar Drilled 9" into in place pavement \*\*
- ▲▲▲ No. 5 x 24" Epoxy Coated Deformed Tie Bar Drilled 9" into in place curb & gutter \*\*

### Sec. A-A



### Sec. B-B

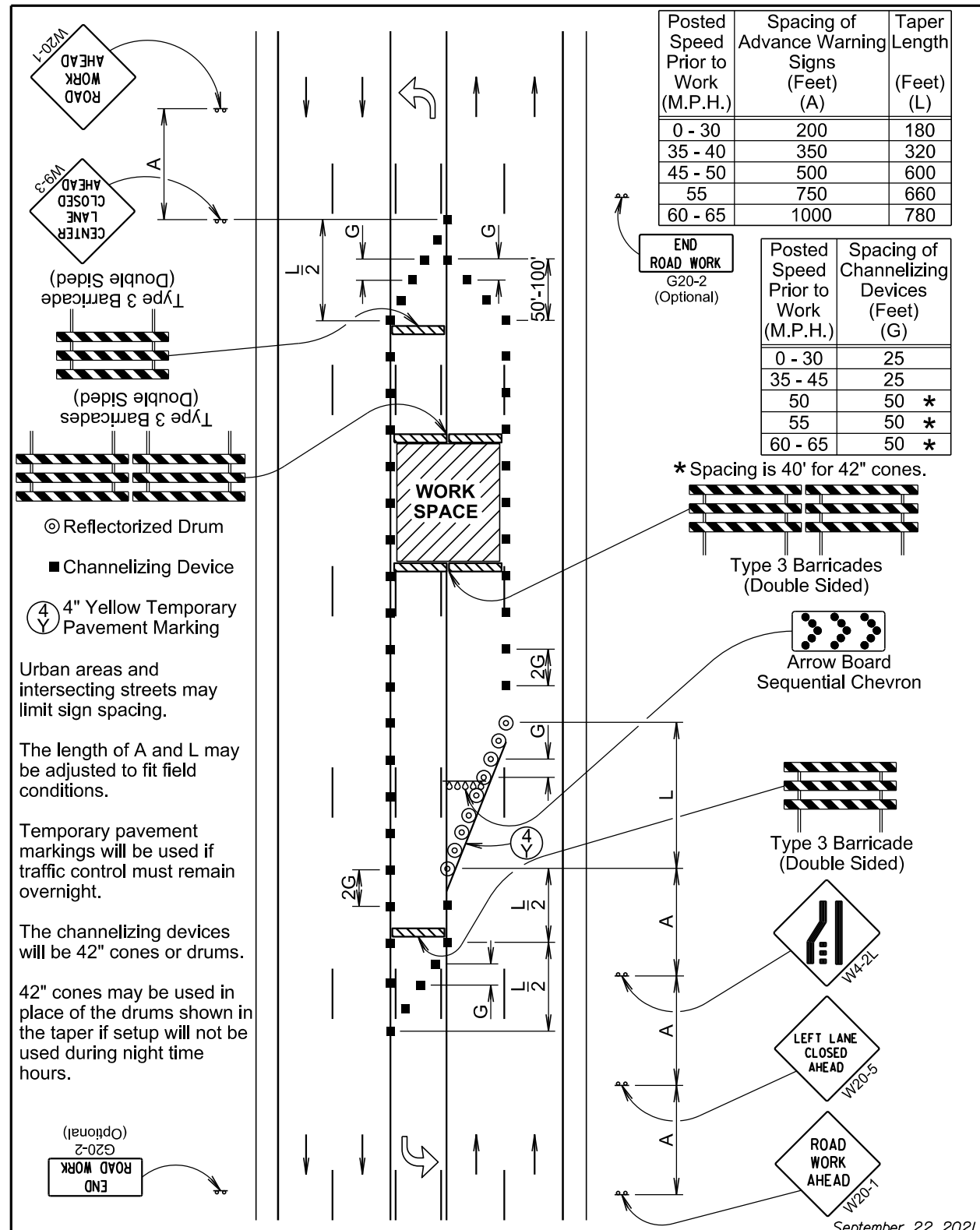


Maintain 2" clear cover on all rebar.

See standard plate for Type B Concrete Curb and Gutter for forming details.

\*\* Cost for this work will be included in the contract unit price per each for Insert Steel Bar in PCC Pavement.





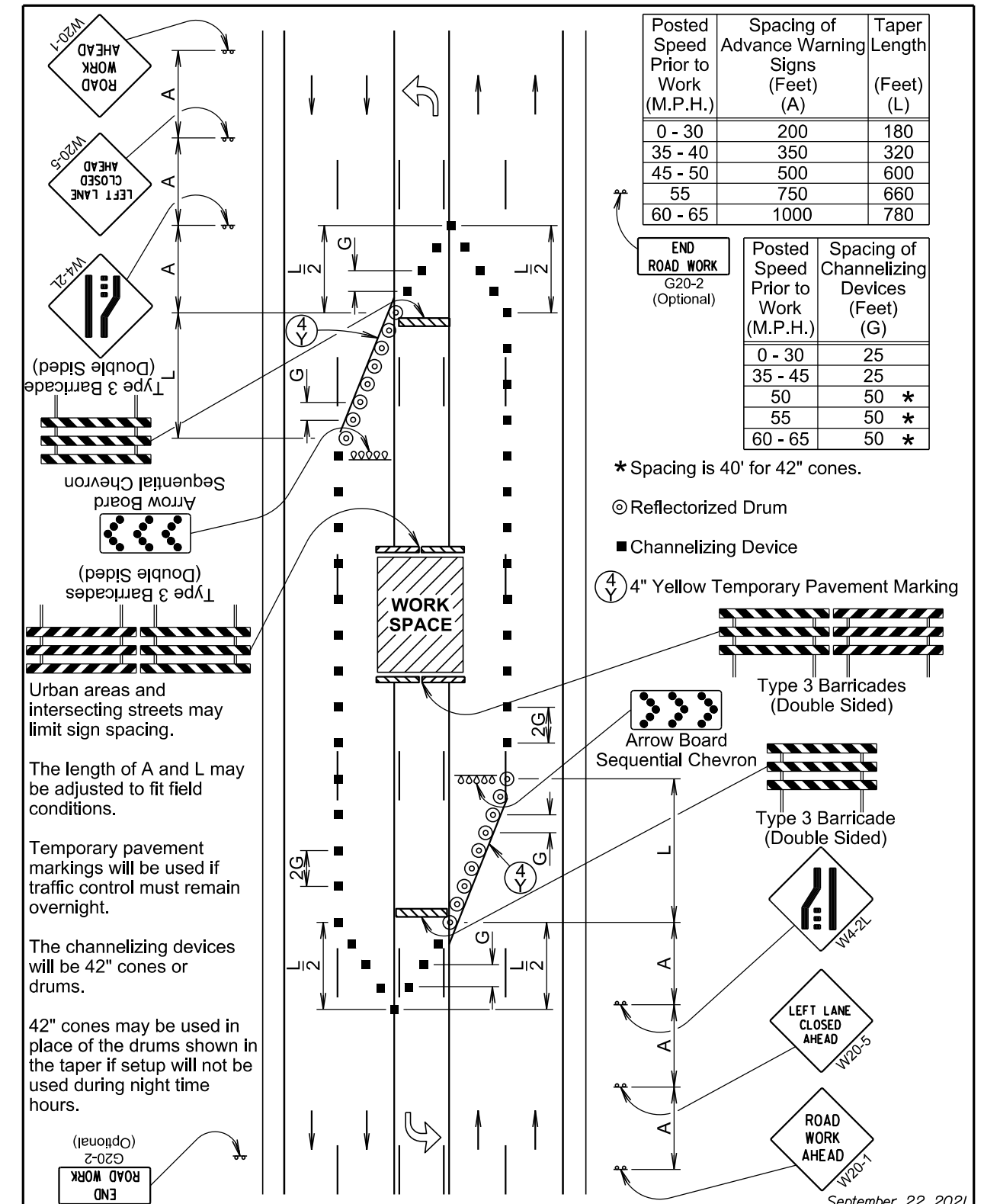
Published Date: 2026

**SDDOT**

**5-LANE, INSIDE 2 LANES CLOSED**

PLATE NUMBER  
**634.56**

Sheet 1 of 1



Published Date: 2026

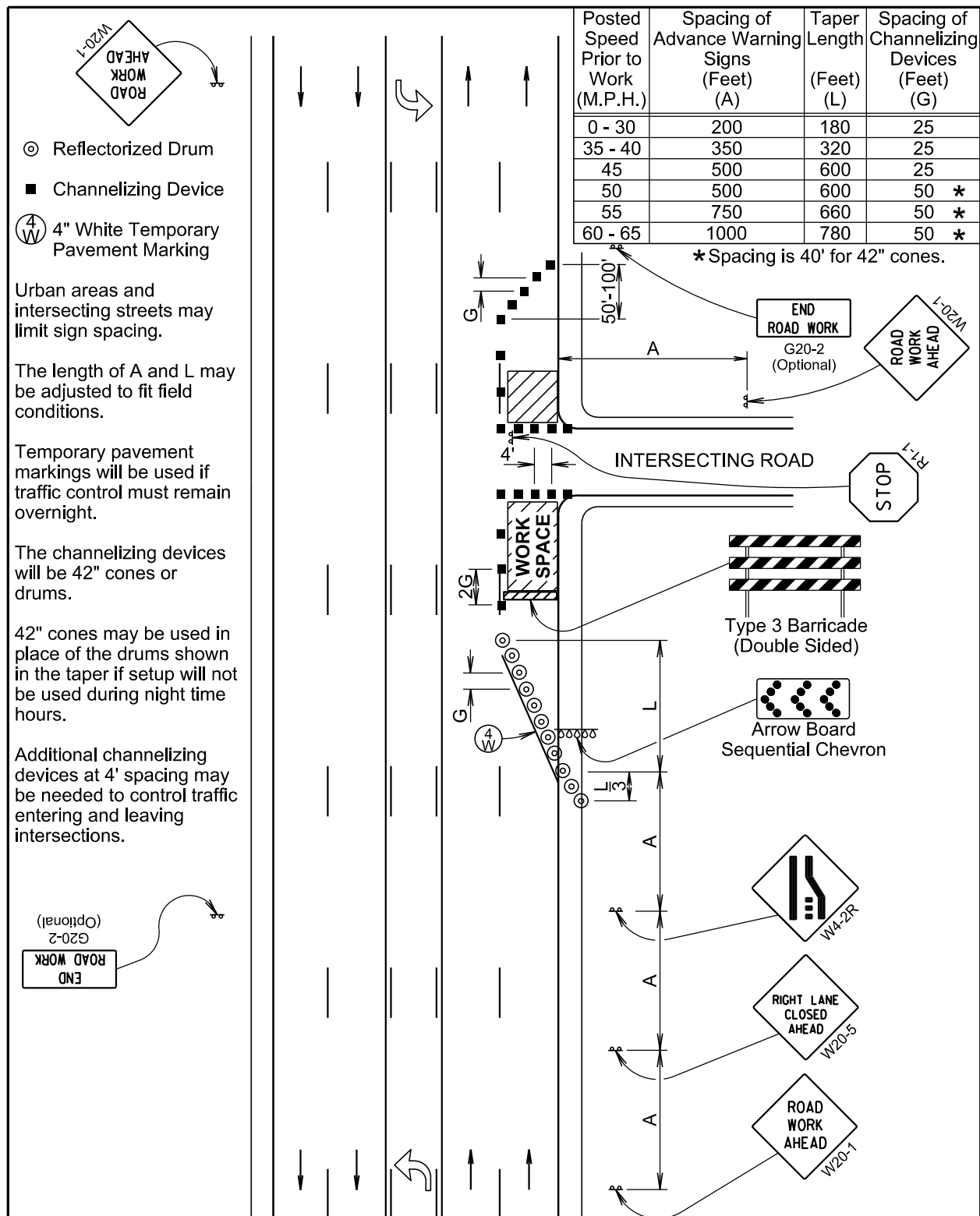
**SDDOT**

**5-LANE, CENTER 3 LANES CLOSED**

PLATE NUMBER  
**634.57**

Sheet 1 of 1

PLOTTED FROM - TRVAINT14



- ⊙ Reflectorized Drum
- Channelizing Device
- Ⓞ 4" White Temporary Pavement Marking

Urban areas and intersecting streets may limit sign spacing.

The length of A and L may be adjusted to fit field conditions.

Temporary pavement markings will be used if traffic control must remain overnight.

The channelizing devices will be 42" cones or drums.

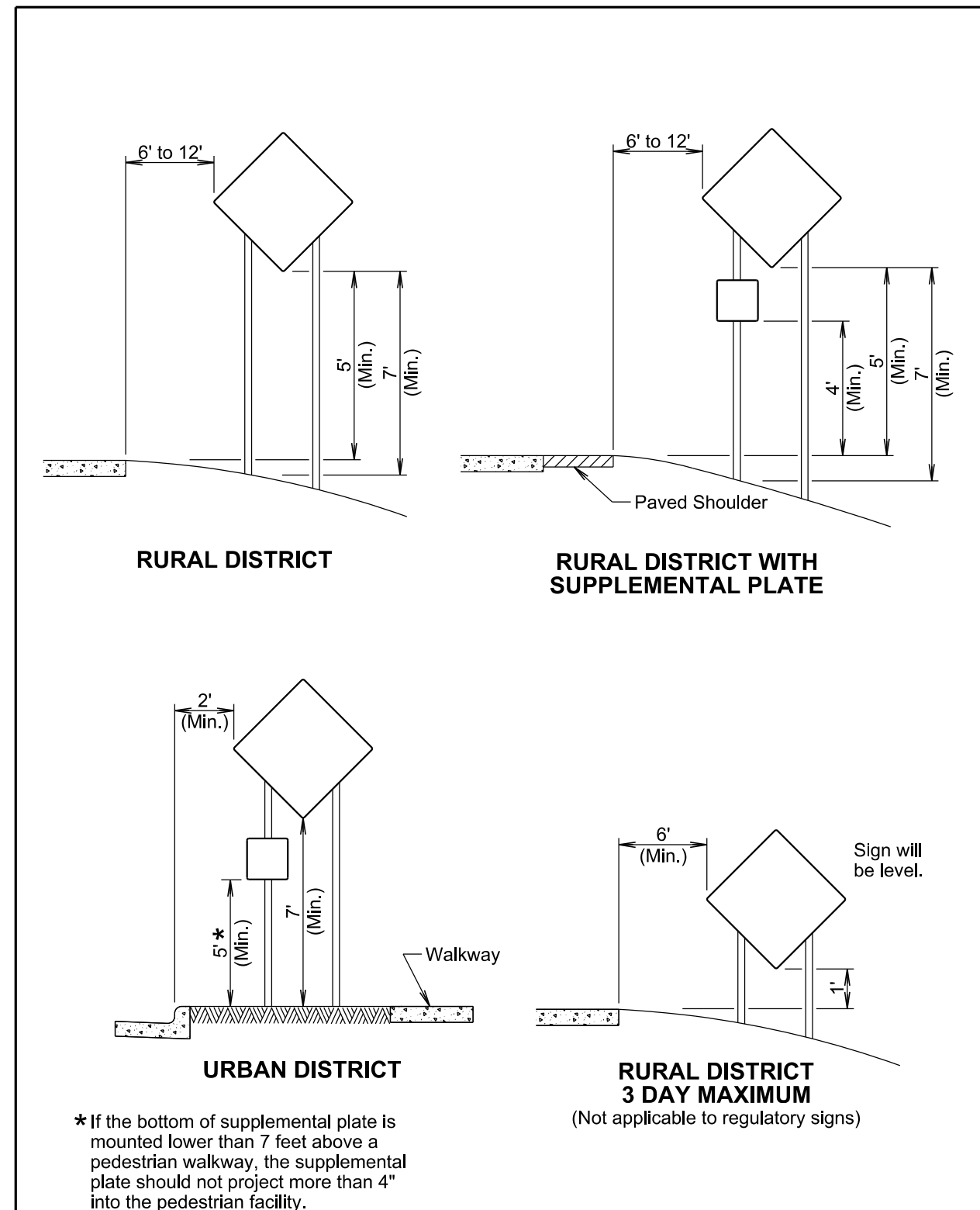
42" cones may be used in place of the drums shown in the taper if setup will not be used during night time hours.

Additional channelizing devices at 4' spacing may be needed to control traffic entering and leaving intersections.

(Optional)  
G20-2  
END ROAD WORK

September 22, 2021

Published Date: 2026	S D D O T	5-LANE, OUTSIDE LANE CLOSED	PLATE NUMBER 634.60
			Sheet 1 of 1

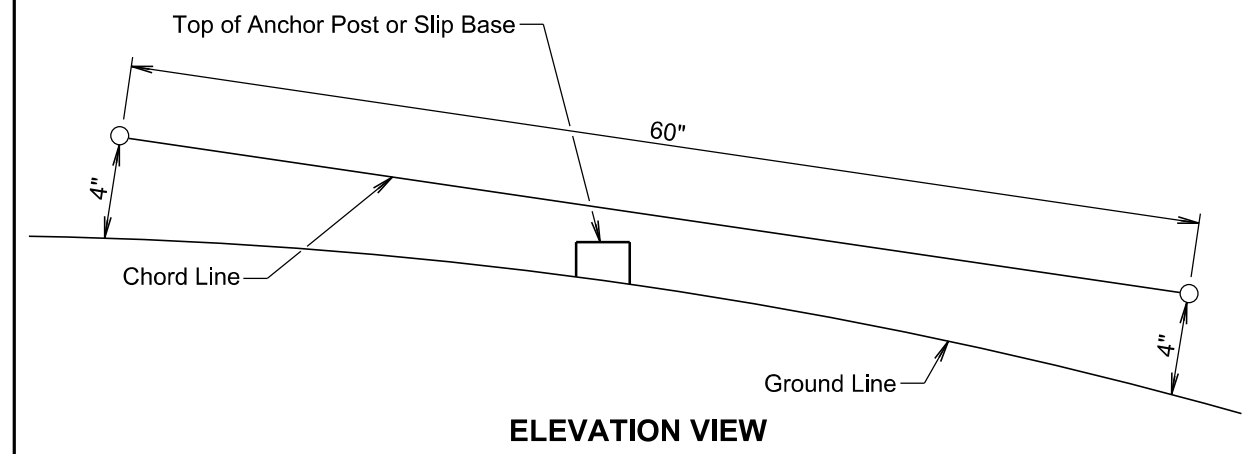
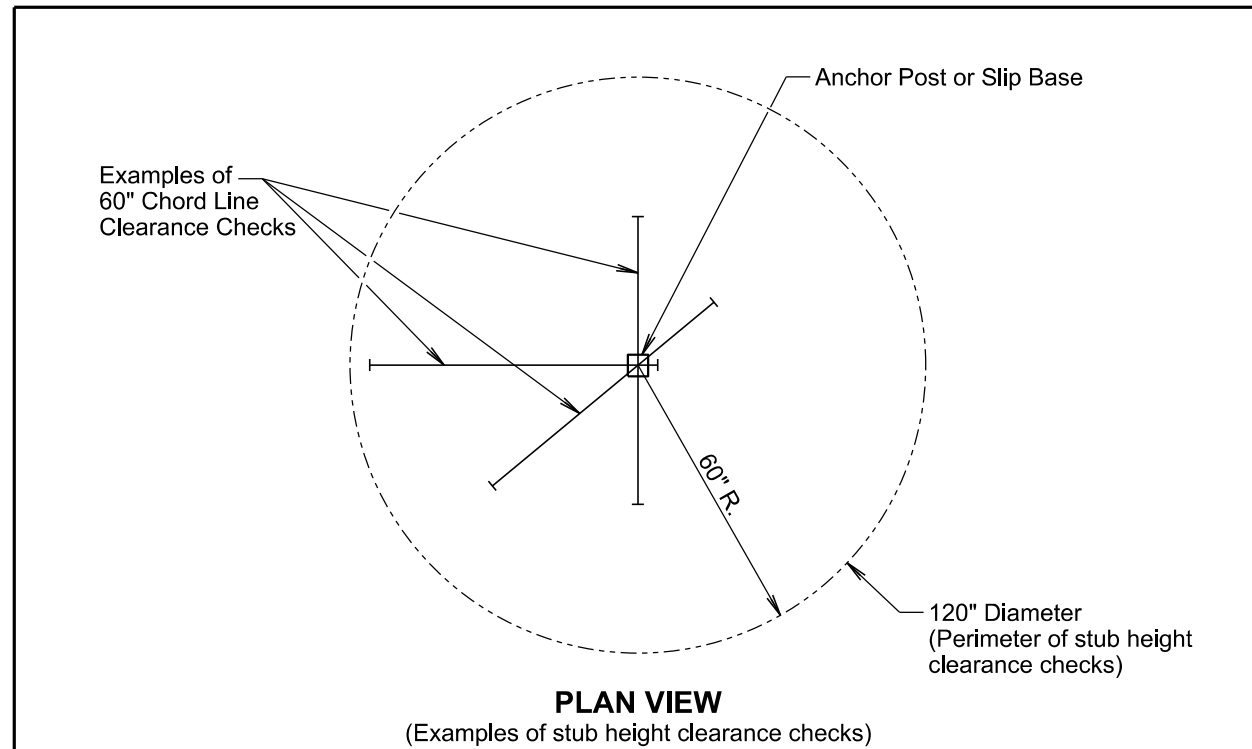


January 22, 2021

Published Date: 2026	S D D O T	CRASHWORTHY SIGN SUPPORTS (Typical Construction Signing)	PLATE NUMBER 634.85
			Sheet 1 of 1

**PCN 09X6 ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS**

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R1-1	STOP	1	30"	5.2	5.2
R9-9	SIDEWALK CLOSED	2	24" x 12"	2.0	4.0
R9-10	SIDEWALK CLOSED with ARROW (L or R) USE OTHER SIDE	2	24" x 12"	2.0	4.0
R9-11	SIDEWALK CLOSED AHEAD with ARROW (L or R) CROSS HERE	2	24" x 18"	3.0	6.0
R9-11a	SIDEWALK CLOSED with ARROW (L or R) CROSS HERE	2	24" x 12"	2.0	4.0
W4-2	LEFT or RIGHT LANE ENDS (symbol)	4	48" x 48"	16.0	64.0
W11-2	PEDESTRIAN (symbol)	4	36" x 36"	9.0	36.0
W16-7P	DOWNWARD DIAGONAL ARROW (plaque)	2	24" x 12"	2.0	4.0
W16-9P	AHEAD (plaque)	2	30" x 18"	3.8	7.6
W20-1	ROAD WORK AHEAD	6	48" x 48"	16.0	96.0
W20-5	LT / RT LANE CLOSED AHEAD	4	48" x 48"	16.0	64.0
W20-4	ONE LANE CLOSED AHEAD	4	48" x 48"	16.0	64.0
W20-7	FLAGGER (symbol)	4	48" x 48"	16.0	64.0
G20-2	END ROAD WORK	4	36" x 18"	4.5	18.0
		<b>CONVENTIONAL ROAD</b>			<b>440.8</b>
		<b>TRAFFIC CONTROL SIGNS SQFT</b>			



**GENERAL NOTES:**

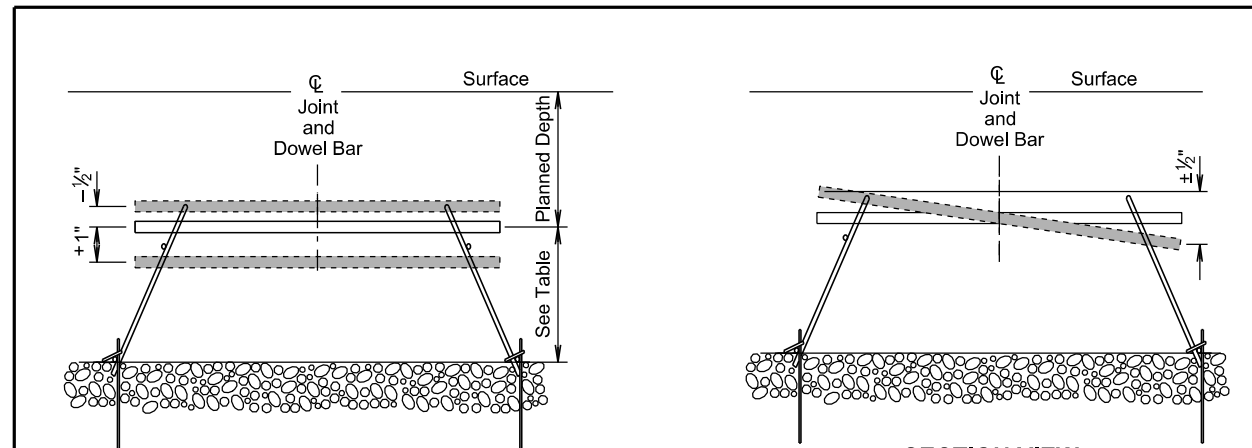
The top of anchor posts and slip bases WILL NOT extend above a 60" chord line within a 120" diameter circle around the post with ends 4" above the ground.

At locations where there is curb and gutter adjacent to the breakaway sign support, the stub height will be a maximum of 4" above the ground line at the localized area adjacent to the breakaway support stub.

The 4" stub height clearance is not necessary for U-channel lap splices where the support is designed to yield (bend) at the base.

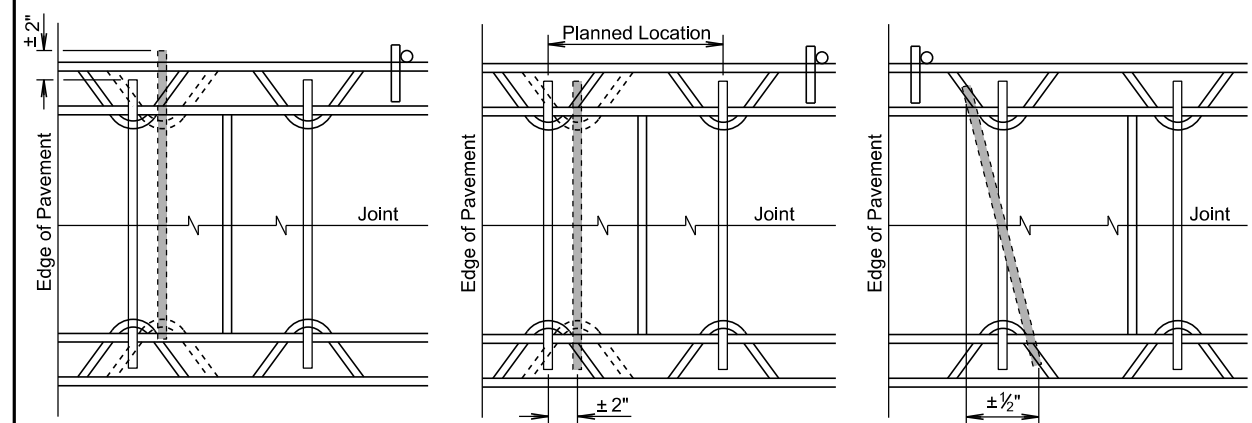
January 22, 2021

<i>Published Date: 2026</i>	<b>S D D O T</b>	<b>BREAKAWAY SUPPORT STUB CLEARANCE</b>	PLATE NUMBER <b>634.99</b>
			Sheet 1 of 1



**SECTION VIEW  
VERTICAL TRANSLATION**  
Depth: mid-depth + 1 inch or - 1/2 inch

**SECTION VIEW  
VERTICAL TILT**  
Vertical rotational alignment: 1/2 inch over 18 inch



**PLAN VIEW  
LONGITUDINAL TRANSLATION**  
Longitudinal side shift: ± 2 inch for 18 inch bars

**PLAN VIEW  
HORIZONTAL TRANSLATION**  
Side shift ± 2 inch

**PLAN VIEW  
HORIZONTAL SKEW**  
Horizontal rotational alignment: 1/2 inch over 18 inch

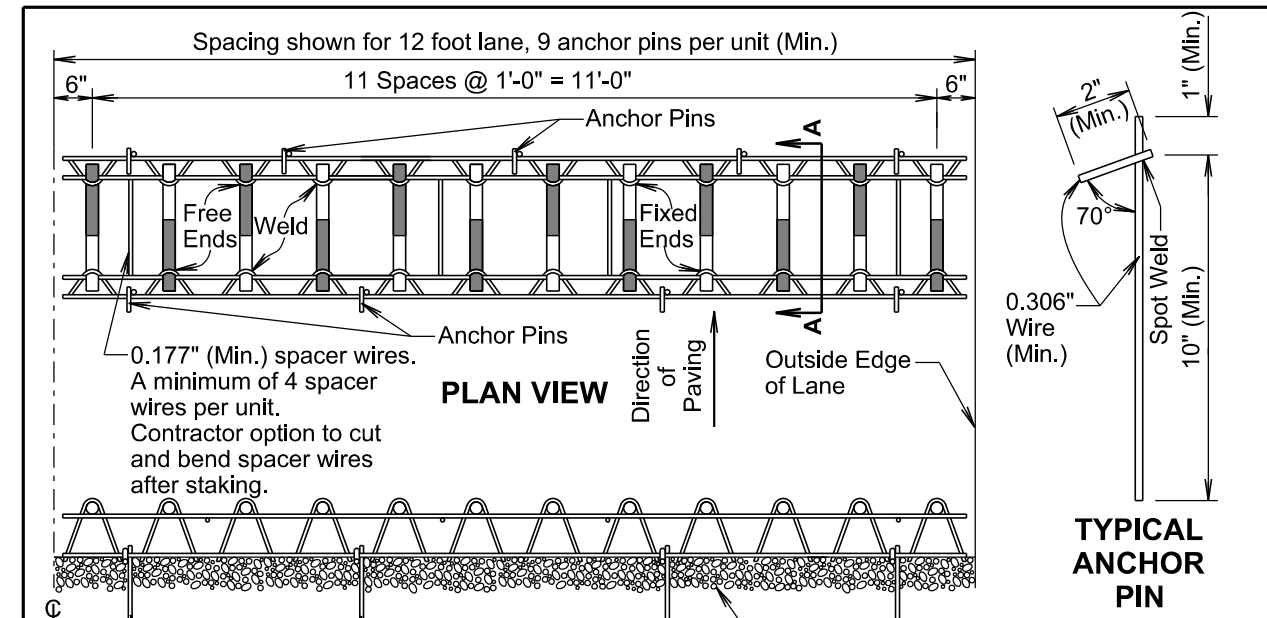
PAVEMENT THICKNESS	EPOXY COATED DOWEL BAR SIZE	HEIGHT TO CENTER
7" to 7 1/2"	1" x 18"	3.0"
8" to 10"	1 1/4" x 18"	4.0"
10 1/2" to 13"	1 1/2" x 18"	5.0"

**GENERAL NOTE:**

The tolerances shown above represent the maximum deviation for acceptance of dowel bar placement.

November 19, 2022

Published Date: 2026	S D D O T	PCC PAVEMENT DOWEL BAR ALIGNMENT TOLERANCES	PLATE NUMBER 380.01
			Sheet 1 of 1

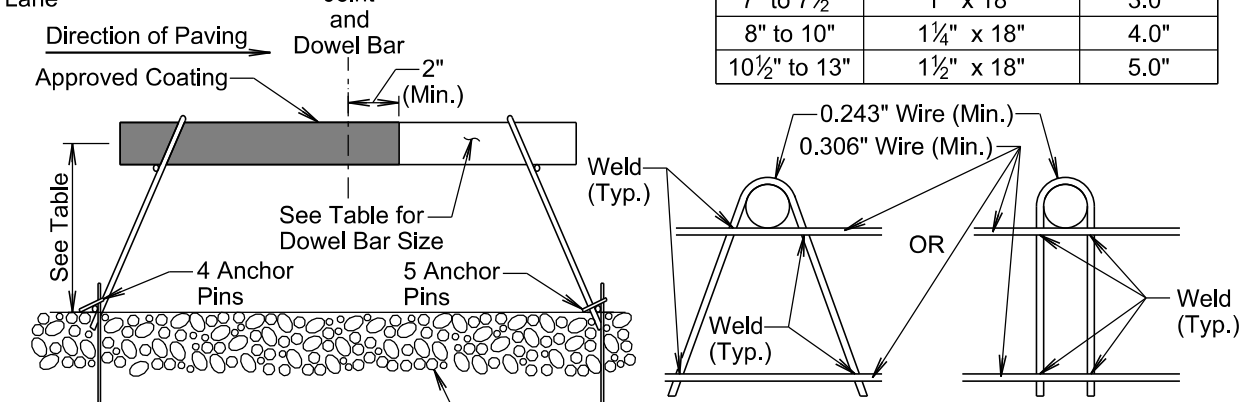


**PLAN VIEW**

**ELEVATION VIEW  
(One Side Rail)**

**TYPICAL  
ANCHOR  
PIN**

PAVEMENT THICKNESS	EPOXY COATED DOWEL BAR SIZE	HEIGHT TO CENTER
7" to 7 1/2"	1" x 18"	3.0"
8" to 10"	1 1/4" x 18"	4.0"
10 1/2" to 13"	1 1/2" x 18"	5.0"



**VIEW A-A**

**SIDE RAIL DETAIL OPTIONS**

**GENERAL NOTES:**

Longitudinal joint tie bars will be placed a minimum of 15 inches from the transverse contraction joint.

The transverse contraction joints will be sawed perpendicular to the centerline of the roadway. The transverse sawed joint will be centered over the dowel bars.

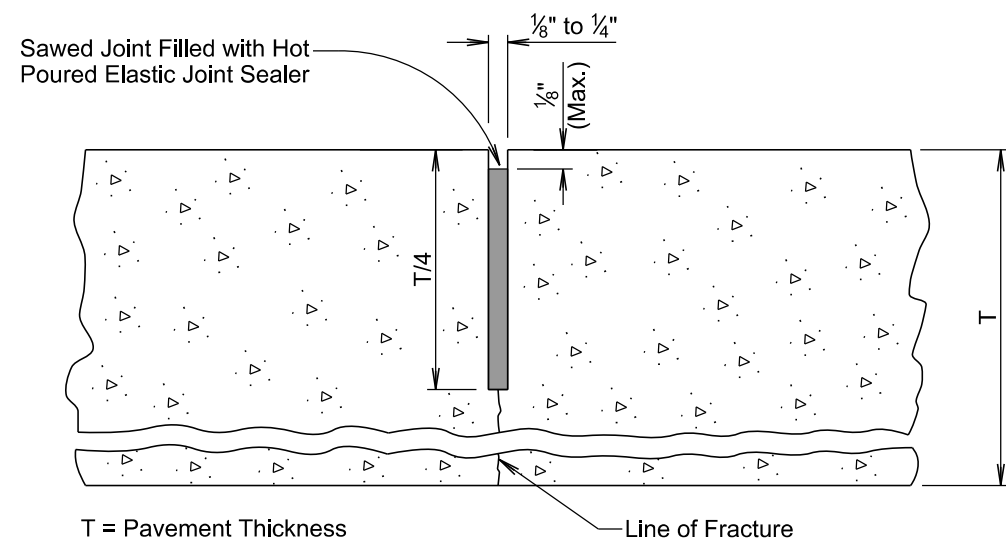
Supporting devices as shown on this sheet, or equivalent as approved by the Engineer, will be used to maintain proper horizontal and vertical alignment of the dowel bars.

All dowel bar alignment tolerances will be as shown in the PCC Pavement Dowel Bar Alignment Tolerances standard plate.

November 19, 2022

Published Date: 2026	S D D O T	PCC PAVEMENT DOWEL BAR ASSEMBLY FOR TRANSVERSE CONTRACTION JOINTS 12 Bar Assembly on Granular Base Material	PLATE NUMBER 380.04
			Sheet 1 of 1

PLOTTED FROM - TRVAINT14



T = Pavement Thickness

Line of Fracture

**GENERAL NOTES:**

If an early entrance saw cut does not develop the full transverse crack, then the saw cut to control cracking will be a minimum 1/4 of the thickness of the pavement.

All hot poured elastic joint sealer material spilled on the surface of the concrete pavement will be removed as soon as the material has cooled. The extent of removal of material will be to the satisfaction of the Engineer. All costs for removal of the spilled joint sealer material will be borne by the Contractor.

November 19, 2022

Published Date: 2026

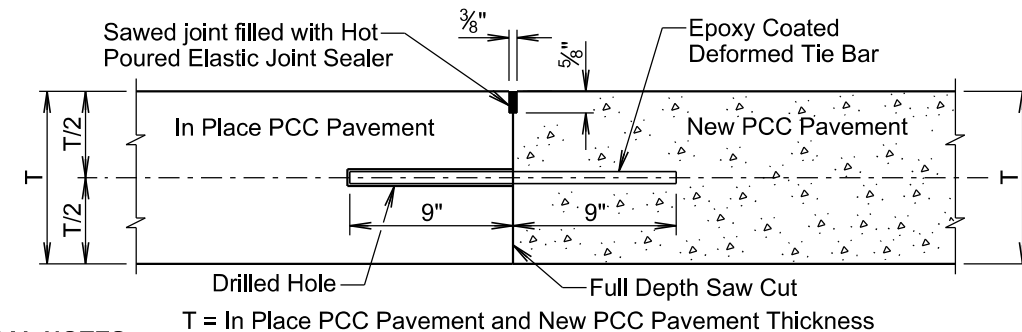
S  
D  
D  
O  
T

**PCC PAVEMENT TRANSVERSE CONTRACTION  
JOINT WITH OR WITHOUT DOWEL BAR ASSEMBLY**

PLATE NUMBER  
380.12

Sheet 1 of 1

**DETAIL A  
TRANSVERSE CONSTRUCTION JOINT WITH TIE BARS**



T = In Place PCC Pavement and New PCC Pavement Thickness

**GENERAL NOTES:**

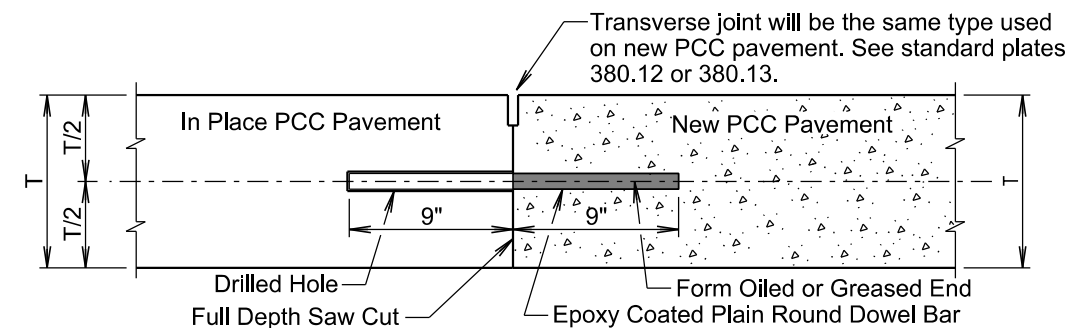
The term "In Place PCC Pavement" in the above drawing indicates that the in place PCC pavement was placed on a previous project.

See sheet 2 of 2 of this standard plate to determine if Detail A will be used.

The tie bars will be embedded a minimum depth of 9 inches into the in place PCC pavement and anchored with an epoxy resin adhesive or a non-shrink grout.

No. 9 epoxy coated deformed tie bars will be used in 10 inch thickness and less PCC Pavement and No. 11 epoxy coated deformed tie bars will be used in 10.5 inch thickness and greater PCC Pavement. The tie bar spacing will be 18 inches center to center and will be a minimum of 3 inches and a maximum of 9 inches from the pavement edges.

**DETAIL B  
TRANSVERSE CONSTRUCTION JOINT WITH DOWEL BARS**



T = In Place PCC Pavement and New PCC Pavement Thickness

**GENERAL NOTES:**

The term "In Place PCC Pavement" in the above drawing indicates that the in place PCC pavement was placed on a previous project or current project.

See sheet 2 of 2 of this standard plate to determine if Detail B will be used.

The plain round dowel bars will be embedded a minimum depth of 9 inches into the in place PCC pavement and anchored with an epoxy resin adhesive or a non-shrink grout.

The epoxy coated plain round dowel bar size, number, and spacing will be the same as detailed on the corresponding dowel bar assembly standard plate (380.04, 380.05, 380.06, or 380.07). The epoxy coated plain round dowel bars will be a minimum of 3 inches and a maximum of 6 inches from the pavement edges.

January 22, 2023

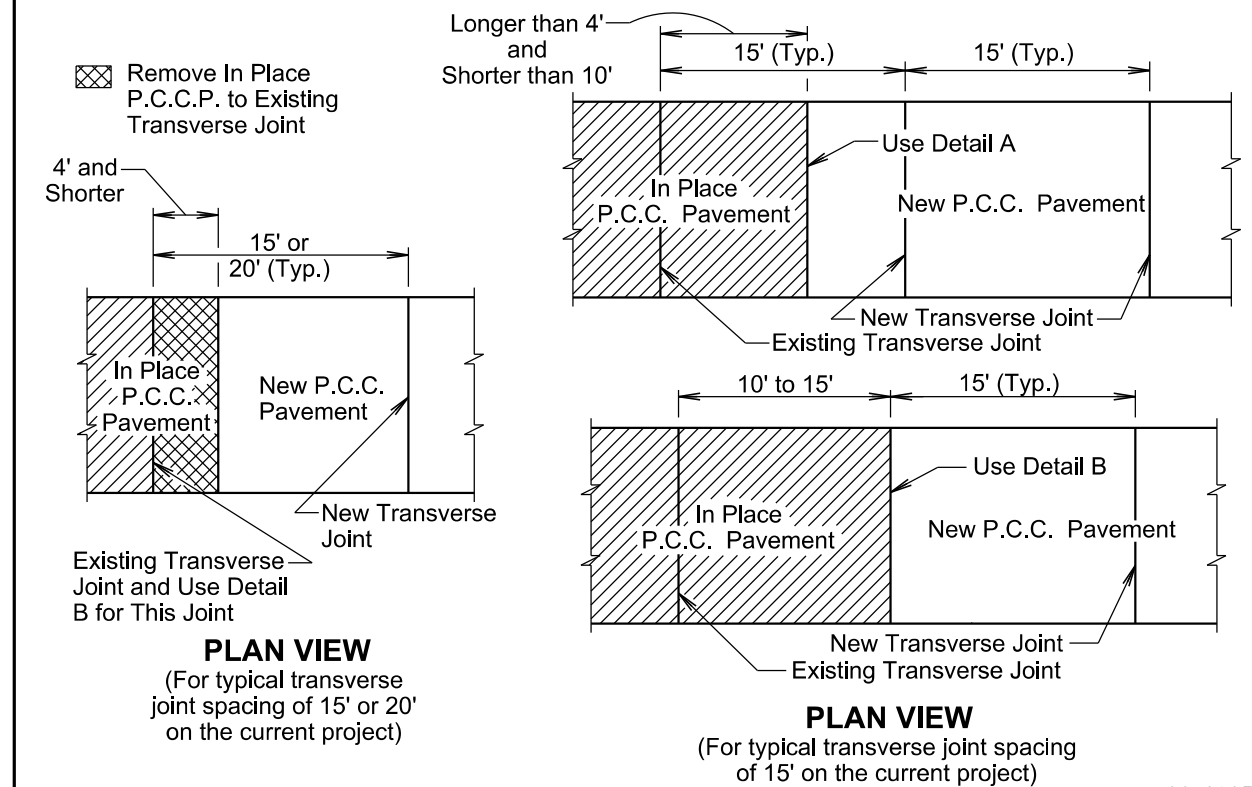
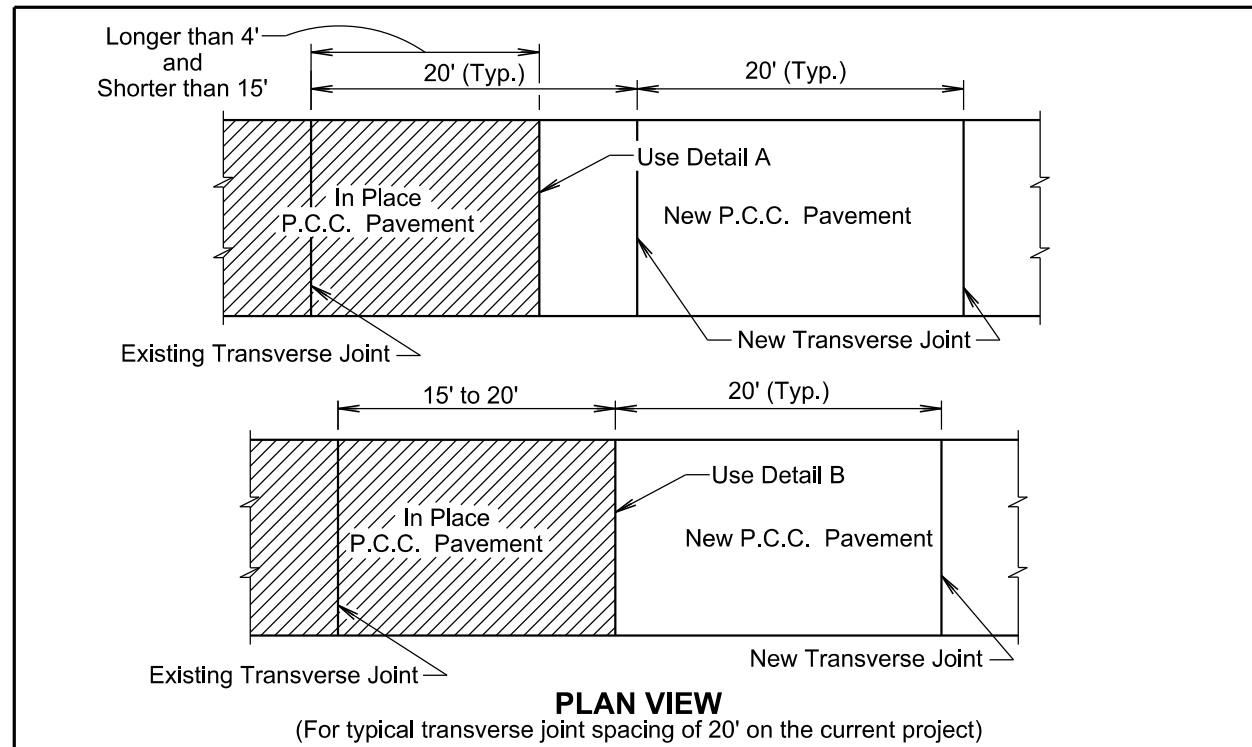
Published Date: 2026

S  
D  
D  
O  
T

**PCC PAVEMENT TRANSVERSE CONSTRUCTION  
JOINTS WITH TIE BARS OR DOWEL BARS**

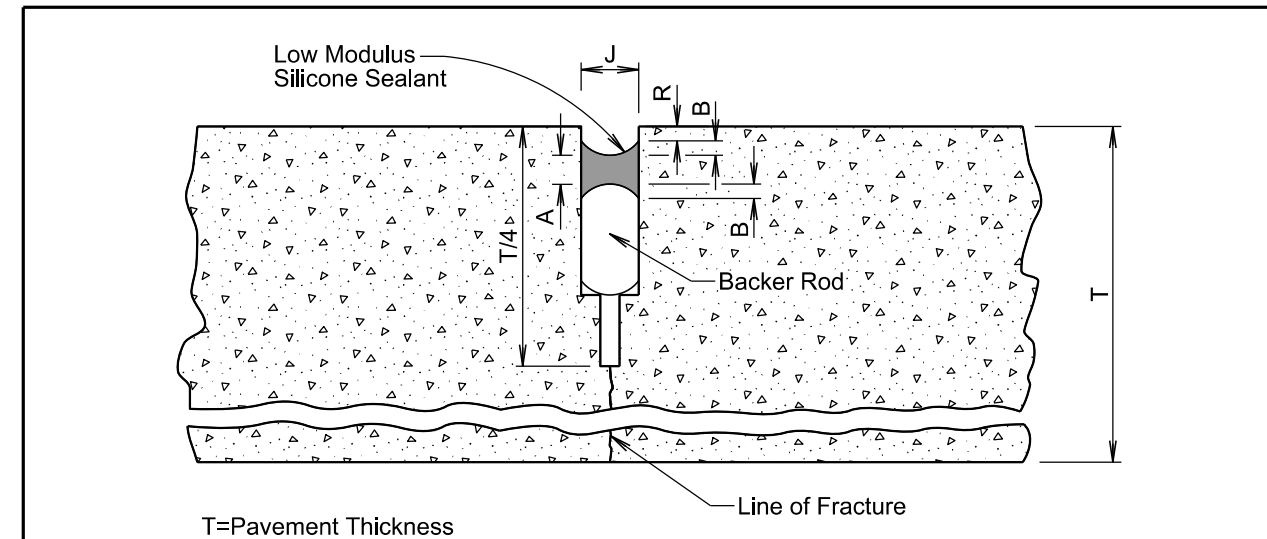
PLATE NUMBER  
380.15

Sheet 1 of 2



January 22, 2023

Published Date: 2026	S D D O T	PCC PAVEMENT TRANSVERSE CONSTRUCTION JOINTS WITH TIE BARS OR DOWEL BARS	PLATE NUMBER 380.15
			Sheet 2 of 2



LOW MODULUS SILICONE SEALANT ALLOWABLE CONSTRUCTION TOLERANCES				
$J = \frac{3}{8}''$				
A (Min.) (in.)	A (Max.) (in.)	B (Min.) (in.)	B (Max.) (in.)	R (in.)
$\frac{3}{16}$	$\frac{5}{16}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{4}$
$J = \frac{1}{2}''$				
A (Min.) (in.)	A (Max.) (in.)	B (Min.) (in.)	B (Max.) (in.)	R (in.)
$\frac{3}{16}$	$\frac{3}{8}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{4}$
$J = \frac{5}{8}''$				
A (Min.) (in.)	A (Max.) (in.)	B (Min.) (in.)	B (Max.) (in.)	R (in.)
$\frac{1}{4}$	$\frac{7}{16}$	$\frac{1}{8}$	$\frac{5}{16}$	$\frac{1}{4}$
$J = \frac{3}{4}''$				
A (Min.) (in.)	A (Max.) (in.)	B (Min.) (in.)	B (Max.) (in.)	R (in.)
$\frac{5}{16}$	$\frac{1}{2}$	$\frac{3}{16}$	$\frac{3}{8}$	$\frac{5}{16}$
$J = 1''$				
A (Min.) (in.)	A (Max.) (in.)	B (Min.) (in.)	B (Max.) (in.)	R (in.)
$\frac{3}{8}$	$\frac{5}{8}$	$\frac{3}{16}$	$\frac{1}{2}$	$\frac{5}{16}$

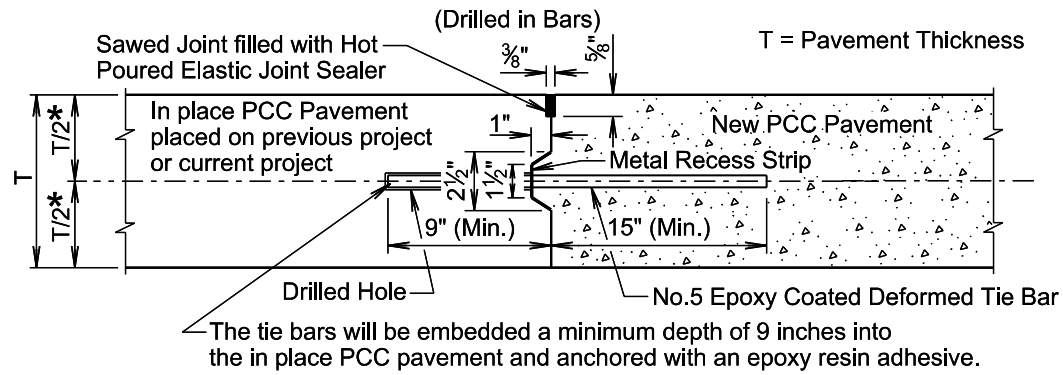
**GENERAL NOTE:**

The backer rod will be a nonmoisture absorbing resilient material approximately 25% larger in diameter than the width of the joint to be sealed.

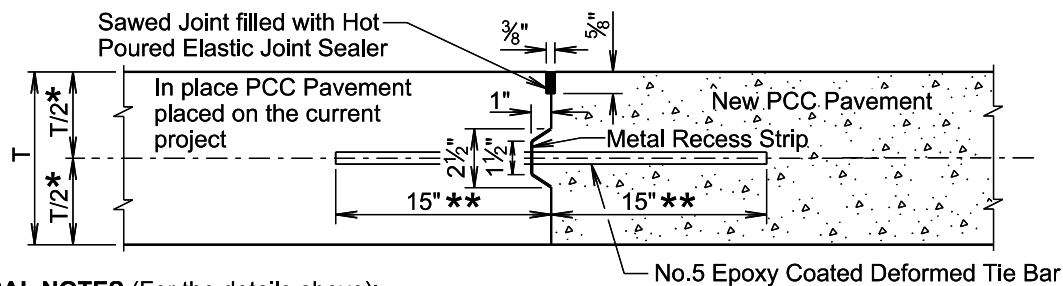
November 19, 2022

Published Date: 2026	S D D O T	RESEAL PCC PAVEMENT JOINT (SILICONE)	PLATE NUMBER 380.16
			Sheet 1 of 1

### LONGITUDINAL CONSTRUCTION JOINT WITH TIE BARS



### LONGITUDINAL CONSTRUCTION JOINT WITH TIE BARS (Inserted or Formed in Bars)



**GENERAL NOTES** (For the details above):

The epoxy coated deformed tie bars will be spaced in accordance with the following tables:

TIE BAR SPACING 48" MAXIMUM	
Transverse Contraction Joint Spacing	Number of Tie Bars
6.5' to 10'	2
10.5' to 14'	3
14.5' to 18'	4
18.5' to 22'	5

TIE BAR SPACING 30" MAXIMUM	
Transverse Contraction Joint Spacing	Number of Tie Bars
5' to 7'	2
7.5' to 9.5'	3
10' to 12'	4
12.5' to 14.5'	5
15' to 17'	6
17.5' to 19.5'	7
20' to 22'	8

The tie bars will be placed a minimum of 15 inches from transverse contraction joints.

The required number of tie bars as shown in the table will be uniformly spaced within each panel. The uniformly spaced tie bars will be spaced a maximum of 48 inches center to center for a female keyway and will be spaced a maximum of 30 inches center to center for a vertical face and male keyway. The maximum tie bar spacing will apply to tie bars within each panel.

The keyway illustrated in the above details depict a female keyway.

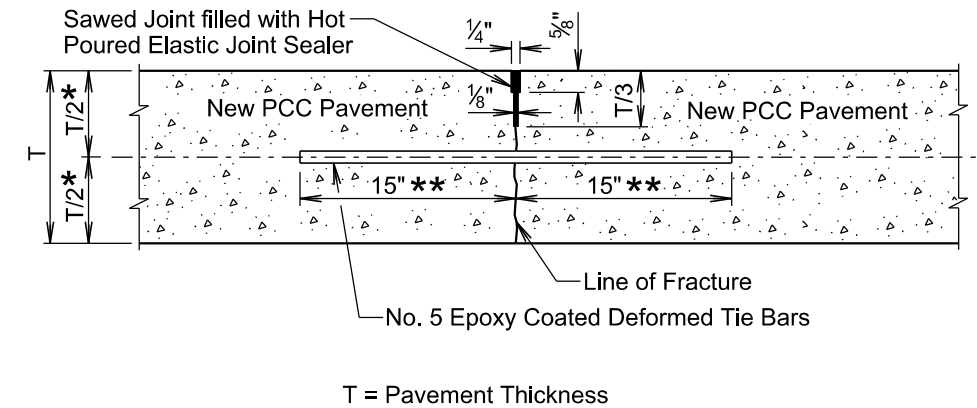
The keyway is optional and is not required. When concrete pavement is formed and a keyway is provided, a metal recess strip will be used. When concrete pavement is slip formed, a metal recess strip is not required.

- \* The vertical placement tolerance for any part of the tie bar will be  $\pm T/6$ .
- \*\* The transverse placement (side shift) tolerance will be  $\pm 3$  inches when measured perpendicular to the longitudinal joint line.

November 19, 2022

Published Date: 2026	S D D O T	PCC PAVEMENT LONGITUDINAL JOINTS WITH TIE BARS	PLATE NUMBER 380.20
			Sheet 1 of 2

### SAWED LONGITUDINAL JOINT WITH TIE BARS (Poured Monolithically)



**GENERAL NOTES** (For the detail above):

The epoxy coated deformed tie bars will be spaced in accordance with the following table:

TIE BAR SPACING 48" MAXIMUM	
Transverse Contraction Joint Spacing	Number of Tie Bars
6.5' to 10'	2
10.5' to 14'	3
14.5' to 18'	4
18.5' to 22'	5

The tie bars will be placed a minimum of 15 inches from the transverse contraction joints.

The required number of tie bars as shown in the table will be uniformly spaced within each panel with a maximum space of 48 inches center to center. The maximum tie bar spacing will apply to tie bars within each panel.

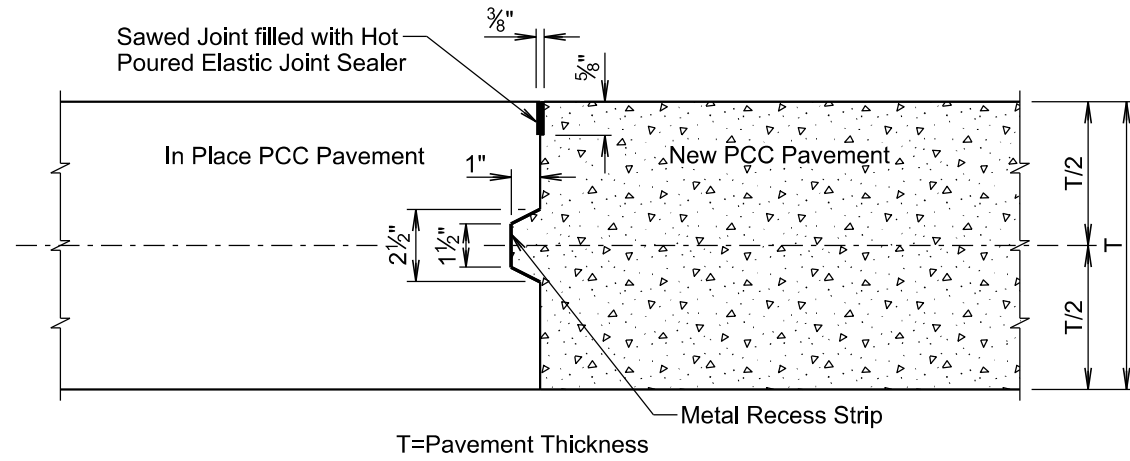
The first saw cut to control cracking will be a minimum of 1/3 the thickness of the pavement. Additional sawing for widening the saw cut to provide the width for the installation of the hot poured elastic joint sealer is necessary.

- \* The vertical placement tolerance for any part of the tie bar will be  $\pm T/6$ .
- \*\* The transverse placement (side shift) tolerance will be  $\pm 3$  inches when measured perpendicular to the longitudinal joint line.

November 19, 2022

Published Date: 2026	S D D O T	PCC PAVEMENT LONGITUDINAL JOINTS WITH TIE BARS	PLATE NUMBER 380.20
			Sheet 2 of 2

### LONGITUDINAL CONSTRUCTION JOINT WITHOUT TIE BARS

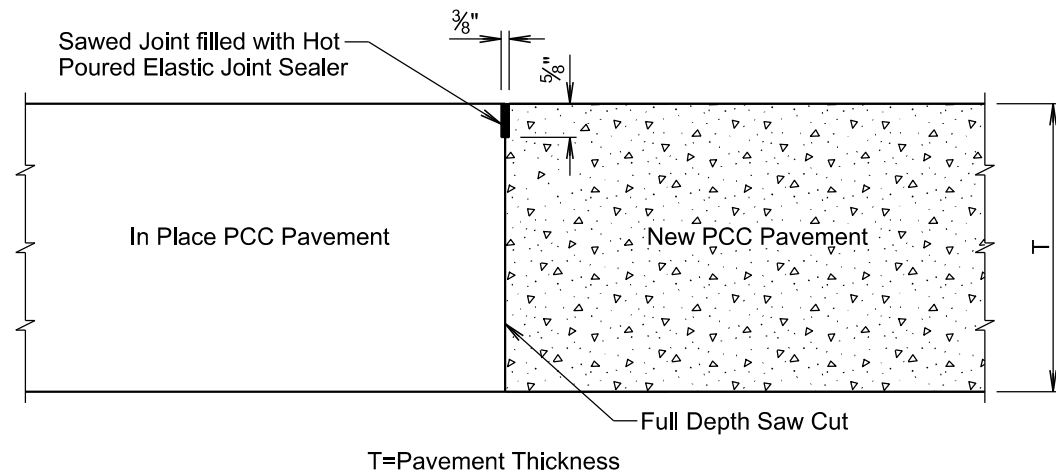


**GENERAL NOTES:**

When concrete pavement is formed and a keyway is provided, a metal recess strip will be used. When concrete pavement is slip formed, a metal recess strip is not required.

The term "In Place PCC Pavement" in the above drawing indicates that the in place PCC pavement was placed on the current project.

### LONGITUDINAL CONSTRUCTION JOINT WITHOUT TIE BARS



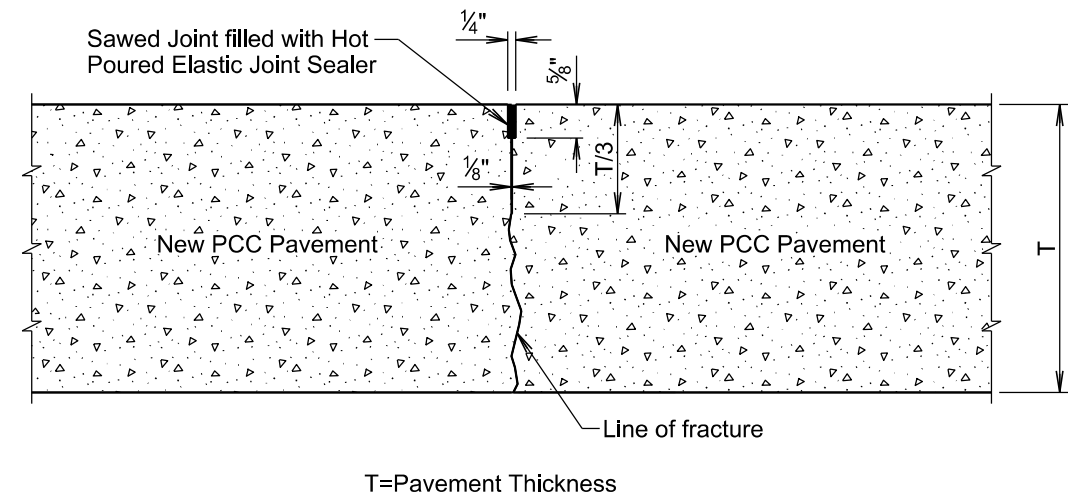
**GENERAL NOTE:**

The term "In Place PCC Pavement" in the above drawing indicates that the in place PCC pavement was placed on a previous project.

November 19, 2022

Published Date: 2026	S D D O T	PCC PAVEMENT LONGITUDINAL JOINTS WITHOUT TIE BARS	PLATE NUMBER 380.22
			Sheet 1 of 2

### SAWED LONGITUDINAL JOINT WITHOUT TIE BARS

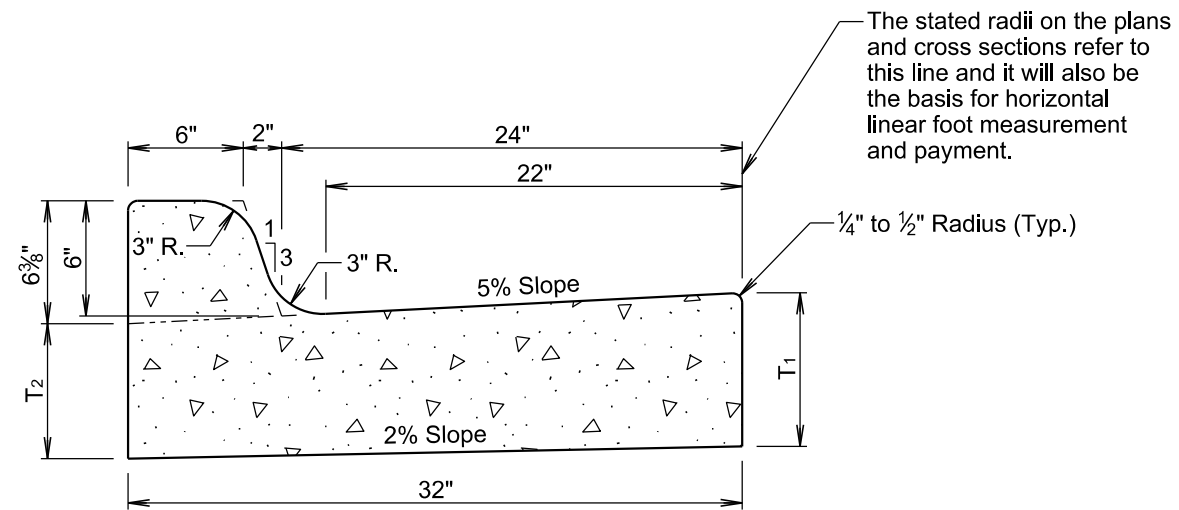


**GENERAL NOTE:**

The first saw cut to control cracking will be a minimum of 1/3 the thickness of the pavement. Additional sawing for widening the saw cut to provide the width for the installation of the hot poured elastic joint sealer will be necessary.

November 19, 2022

Published Date: 2026	S D D O T	PCC PAVEMENT LONGITUDINAL JOINTS WITHOUT TIE BARS	PLATE NUMBER 380.22
			Sheet 2 of 2



TYPE B CONCRETE CURB AND GUTTER				
Type	T <sub>1</sub> (Inches)	T <sub>2</sub> (Inches)	Cu. Yd. Per Lin. Ft.	Lin. Ft. Per Cu. Yd.
B66	6	5 1/16	0.057	17.7
B67	7	6 1/16	0.065	15.4
B68	8	7 1/16	0.073	13.7
B68.5	8.5	7 9/16	0.077	13.0
B69	9	8 1/16	0.081	12.3
B69.5	9.5	8 9/16	0.085	11.7
B610	10	9 1/16	0.090	11.2
B610.5	10.5	9 9/16	0.094	10.7
B611	11	10 1/16	0.098	10.2
B611.5	11.5	10 9/16	0.102	9.8
B612	12	11 1/16	0.106	9.4

**GENERAL NOTES:**

When concrete curb and gutter longitudinally adjoins new concrete pavement, the method of attachment will be by one of the methods shown on standard plate 380.21.

See standard plate 650.90 for expansion and contraction joints in the curb and gutter.

January 22, 2023

Published Date: 2026

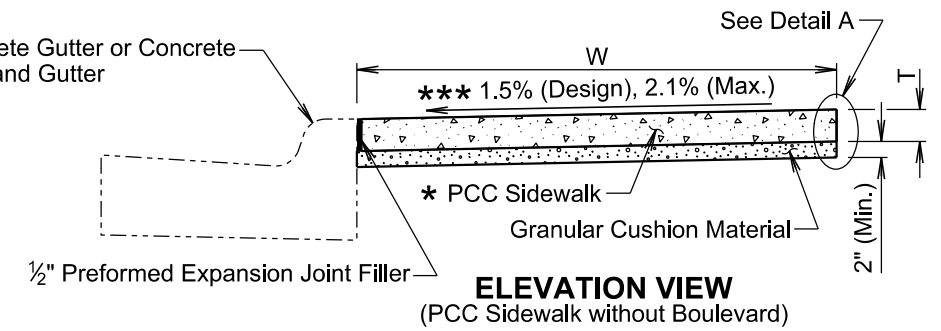
S  
D  
D  
O  
T

**TYPE B CONCRETE CURB AND GUTTER**

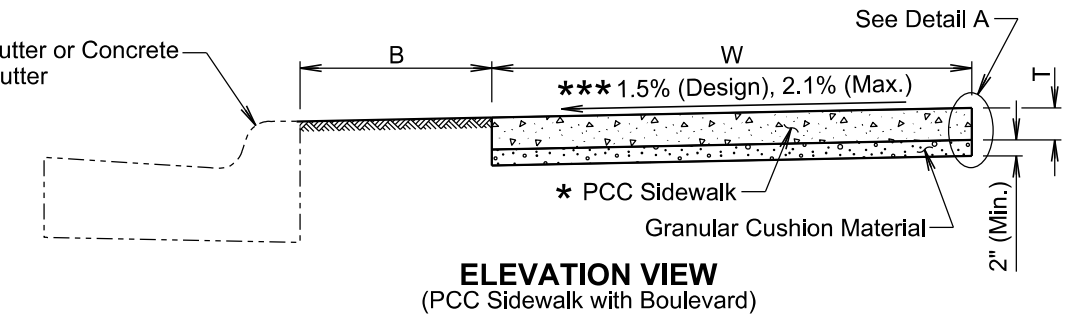
PLATE NUMBER  
650.01

Sheet 1 of 1

\* Concrete Gutter or Concrete Curb and Gutter



\* Concrete Gutter or Concrete Curb and Gutter

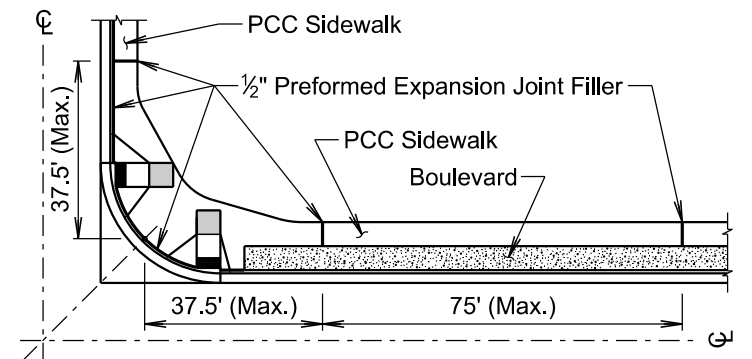


B Width of boulevard as specified in the plans.

T Thickness of PCC sidewalk as specified in the plans.

W Width of PCC sidewalk as specified in the plans.

\* Type as specified in the plans.



**GENERAL NOTES:**

The PCC sidewalk will be constructed in accordance with Section 651 of the Specifications.

\*\*\* The cross slope of the sidewalk is designed at 1.5% and the maximum slope allowed is 2.1% unless specified otherwise in the plans.

The maximum length between expansion joints in the PCC sidewalk is 75 feet.

PCC sidewalk placed adjacent to intersection of roadways will have an expansion joint placed transversely a maximum of 37.5 feet from the intersection. See Plan View.

An expansion joint in the PCC sidewalk will consist of a 1/2-inch thick preformed expansion joint filler material placed full depth and width of the PCC sidewalk.

\*\* Large areas of PCC pavement adjacent to the PCC sidewalk may require a different joint treatment than shown in the detail. If a different joint detail is necessary, plans will contain the joint detail and the Contractor will construct the joint treatment in accordance with the plans.

April 8, 2025

Published Date: 2026

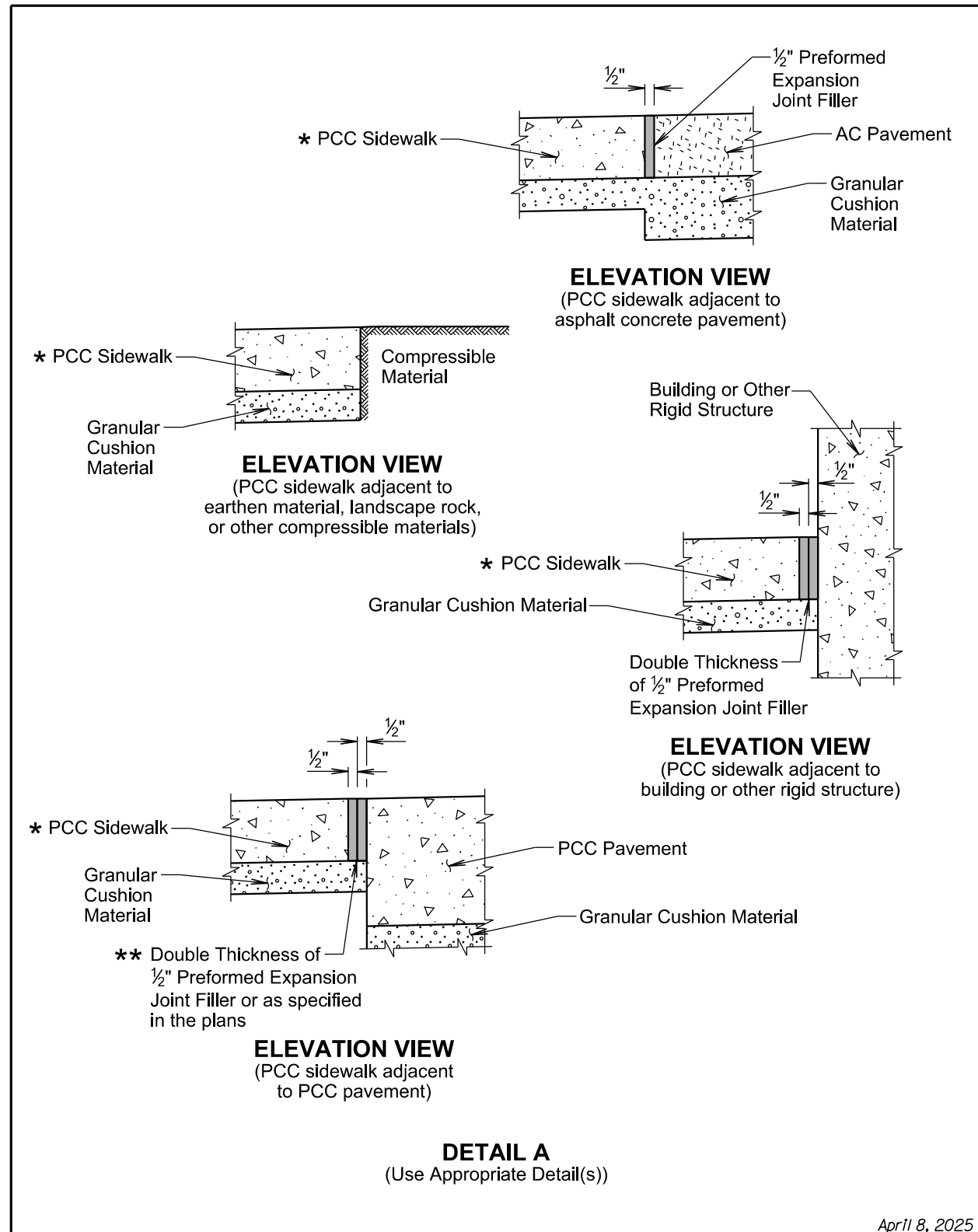
S  
D  
D  
O  
T

**PCC SIDEWALK**

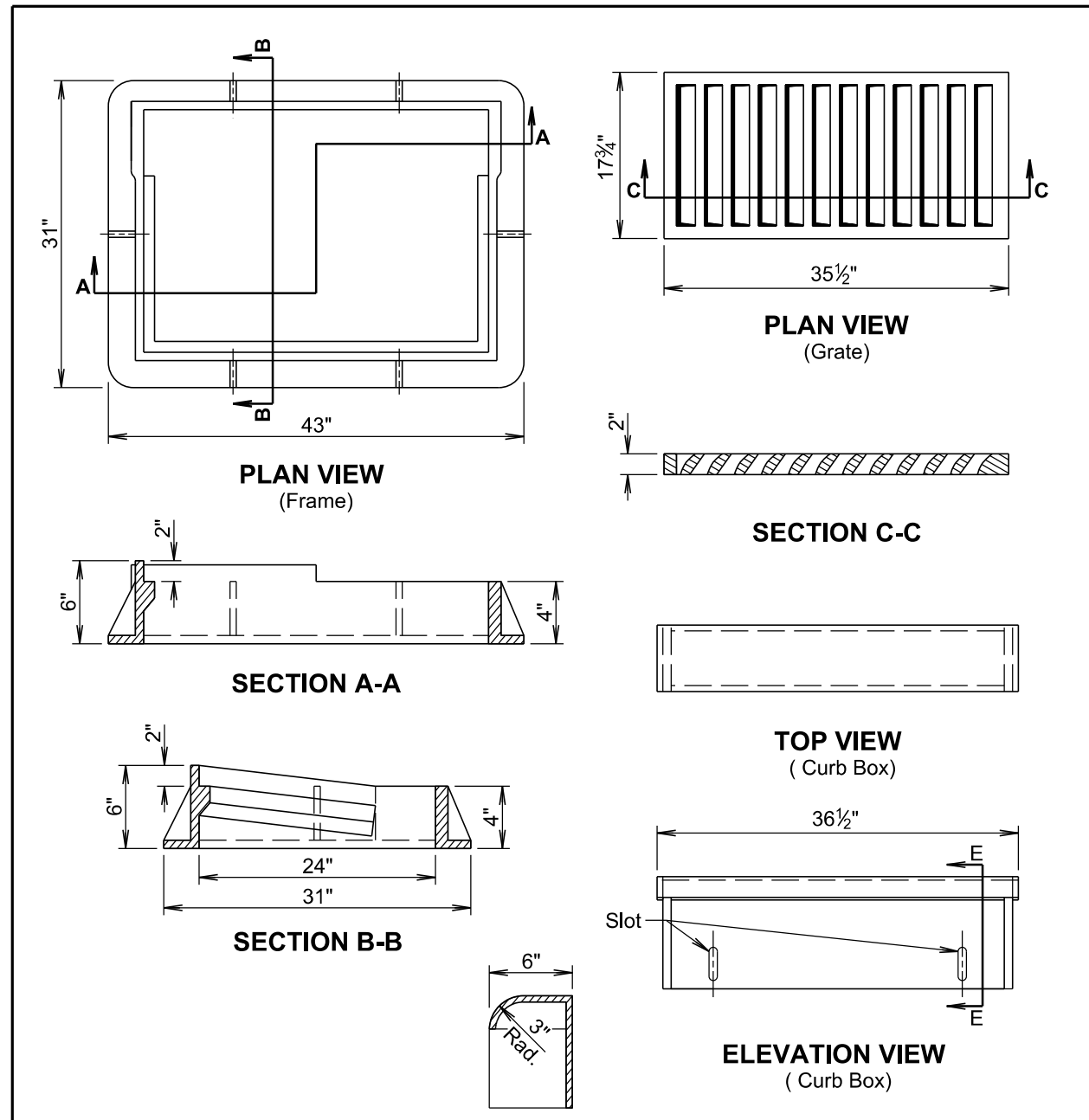
PLATE NUMBER  
651.75

Sheet 1 of 2

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH-P 0012(330)	29	30



<i>Published Date: 2026</i>	S D D O T	PCC SIDEWALK	PLATE NUMBER 651.75
			Sheet 2 of 2



**GENERAL NOTES:**

The product dimensions may vary from those shown on the standard plate depending on the manufacturer. Grate size and configuration will be similar to the standard plate for hydraulic capacity and bicycle safety. Any variation in dimensions will be approved by the Engineer and the type B frame and grate assembly will be from a manufacturer on the approved products lists.

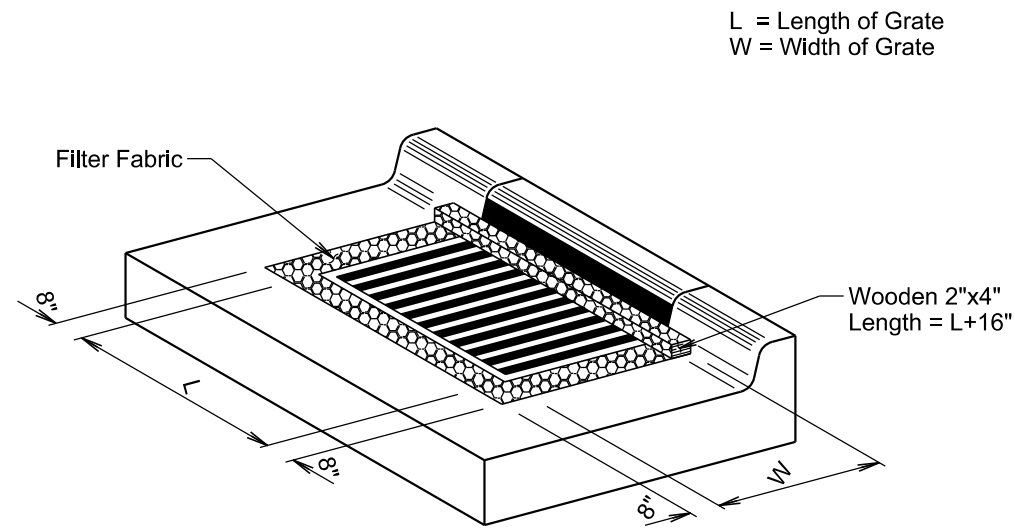
Design load for the grate will meet the requirements of AASHTO HL-93.

The curb box will be adjustable 6" to 9".

<i>Published Date: 2026</i>	S D D O T	TYPE B FRAME AND GRATE	PLATE NUMBER 670.80
			Sheet 1 of 1

PLOTTED FROM - TRVAINT14

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH-P 0012(330)	30	30



**ISOMETRIC VIEW**

**GENERAL NOTES:**

The grate and curb and gutter shown are for illustrative purposes only.

The sediment control at inlet with frame and grate will be placed at locations stated in the plans or at locations determined by the Engineer.

The filter fabric will be the type specified in the plans.

The filter fabric will be placed in the inlet opening prior to placing the grate. Approximately 18 inches of excess filter fabric will be wrapped around the 2"x4" and stapled securely to the 2"x4" after the grate has been placed.

The Contractor and Engineer will inspect the sediment control device in accordance with the storm water permit. The Contractor will maintain the sediment control device by removing accumulated sediment and replacing torn filter fabric with new filter fabric.

The removed sediment will be placed at a location away from the drop inlet where the sediment will not be washed back into the drop inlet or other storm sewer system.

All costs for furnishing, installing, inspecting, maintaining, removing, and replacing the sediment control device at the inlet including labor, equipment, and materials will be incidental to the contract unit price per each for "Sediment Control at Inlet with Frame and Grate".

February 14, 2020

Published Date: 2026

S  
D  
D  
O  
T

**SEDIMENT CONTROL AT INLETS  
WITH FRAMES AND GRATES**

PLATE NUMBER  
734.10

Sheet 1 of 1