

STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION  
PLANS FOR PROPOSED

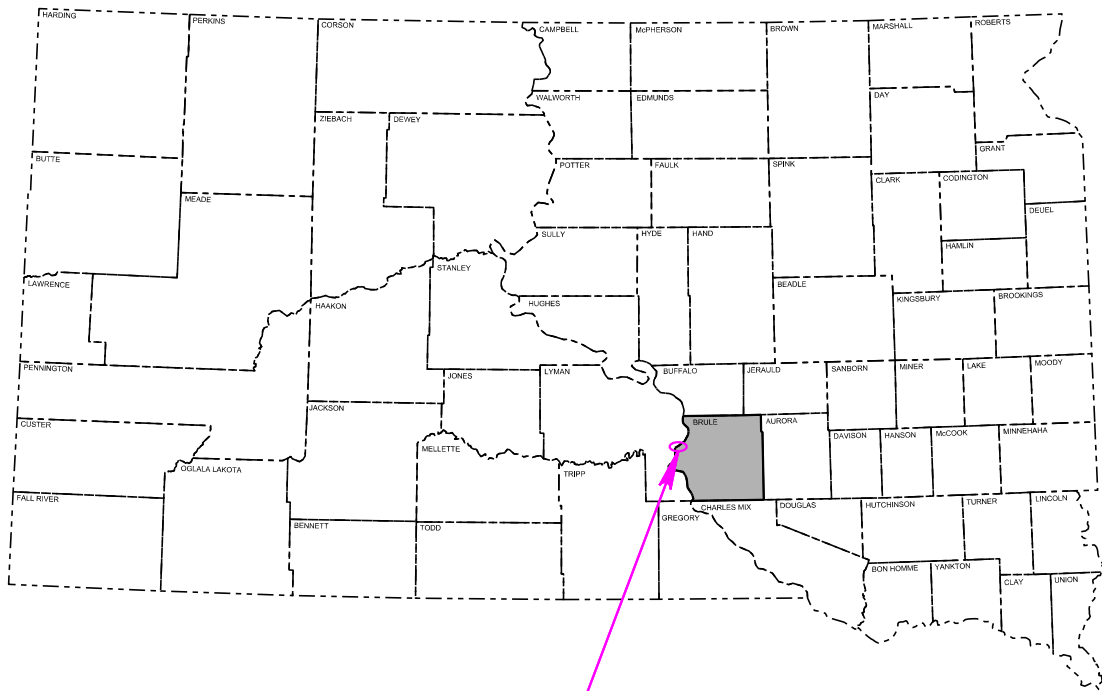
PROJECT IM 0906(00)264  
BRULE COUNTY  
SIDEWALK AND CURB & GUTTER  
PCN 06JG

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0906(00)264	1	12

Plotting Date: 8/31/2017

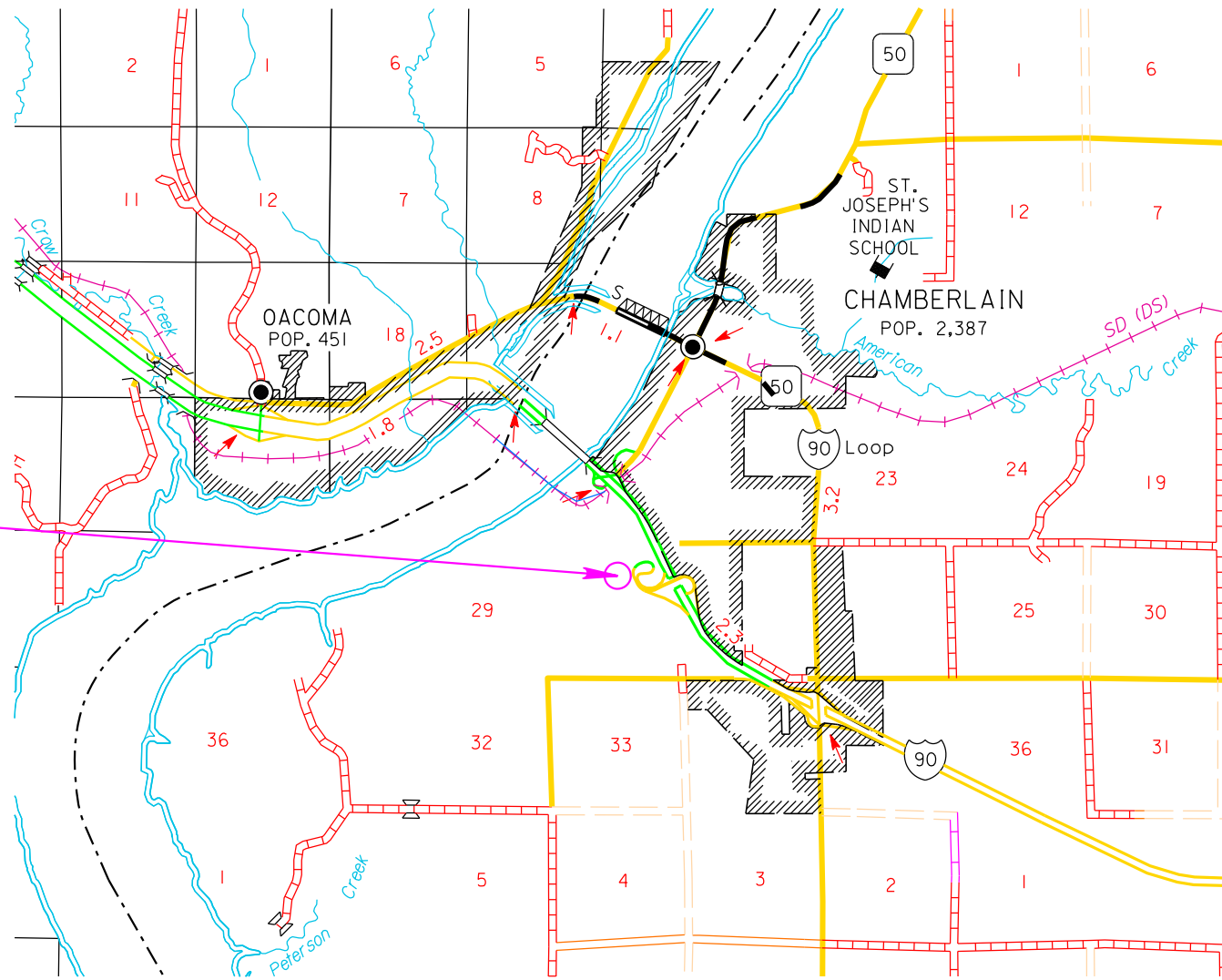
INDEX OF SHEETS

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- 2-3 Estimate of Quantities and Notes
- 4 Symbology and Legend
- 5 Sign Plan
- 6 Removal Plan
- 7 Layout Plan
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PROJECT

**PROJECT LOCATION**  
Lewis & Clark I-90 Info Center,  
Rest Area Facility &  
Dignity Statue



**DESIGN DESIGNATION**

- ADT ( )
- ADT ( )
- DHV
- D
- T DHV
- T ADT
- V

**STORM WATER PERMIT**

- Major Receiving
- Body of Water:
- Area Disturbed:
- Total Project Area:
- Approx. Begin Lat,Long:

	Gross Length	Feet	Miles
	Length of Exceptions	Feet	Miles
	Net Length	Feet	Miles



# ESTIMATE OF QUANTITIES AND NOTES

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0906(00)264	2	12

## ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
110E0300	Remove Concrete Curb and/ or Gutter	72	Ft
110E1140	Remove Concrete Sidewalk	463	SqYd
634E0110	Traffic Control Signs	36	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
650E0060	Type B66 Concrete Curb and Gutter	72	Ft
651E0040	4" Concrete Sidewalk	7587	SqFt
900E5100	Bench	4	Each
900E5410	Modify Sprinkler System	Lump Sum	LS

## SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2015 Edition and Required Provisions, Supplemental Specifications, and Special Provisions as included in the Proposal.

## ENVIRONMENTAL COMMITMENTS

An Environmental Commitment is a measure that SDDOT commits to implement in order to avoid, minimize, and/or mitigate a real or potential environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency mentioned below with permitting authority can influence a project if perceived 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. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office. The environmental commitments associated with this project are as follows:

### COMMITMENT C: WATER SOURCE

The Contractor shall not withdraw water with equipment previously used outside the State of South Dakota without prior approval from the SDDOT Environmental Office. Thoroughly wash all construction equipment before entering South Dakota to reduce the risk of invasive species introduction into the project vicinity.

### Action Taken/Required:

The Contractor shall obtain the necessary permits from the regulatory agencies such as the Department of Environment and Natural Resources (DENR) and the United States Army Corps of Engineers (COE) prior to executing water extraction activities.

### 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.

### COMMITMENT H: WASTE DISPOSAL SITE

The Contractor shall 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) shall 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 Environment and Natural Resources.

The waste disposal site(s) shall 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 Project Engineer.

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

1. Construction and/or demolition debris consisting of concrete, asphalt concrete, or other similar materials shall be buried in a trench completely separate from wood debris. The final cover over the construction and/or demolition debris shall consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the Public ROW shall be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor shall control the access to waste disposal sites not within the Public ROW through the use of 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 of time not to exceed the duration of the project. Prior to project completion, the waste shall 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) shall be incidental to the various contract items.

### COMMITMENT I: HISTORICAL PRESERVATION OFFICE CLEARANCES

The SDDOT has obtained concurrence with the State Historical Preservation Office (SHPO or THPO) for all work included within the project limits and all department designated sources and designated option material sources, stockpile sites, storage areas, and waste sites provided within the plans.

### Action Taken/Required:

All earth disturbing activities not designated within the plans require review of cultural resources impacts. 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 shall arrange and pay for a cultural resource survey and/or records search. 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; however, a cultural resources survey may need to be conducted by a qualified archaeologist.

The Contractor shall provide ARC with the following: a topographical map or aerial view on 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 shall submit the records search or cultural resources survey report and if the location of the site is within the current geographical or historic boundaries of any South Dakota reservation to SDDOT Environmental Engineer, 700 East Broadway Avenue, Pierre, SD 57501-2586 (605-773-3180). 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.

If evidence for cultural resources is uncovered during project construction activities, then such activities shall cease and the Project Engineer shall be immediately notified. The Project Engineer will contact the SDDOT Environmental Engineer in order to determine an appropriate course of action.

SHPO/THPO review does not relieve the Contractor of the responsibility 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 shall provide the required permits and clearances to the Project Engineer at the preconstruction meeting.

### UTILITIES

The Contractor shall be aware that the existing utilities shown in the plans were surveyed prior to the design of this project and might have been relocated or replaced by a new utility facility prior to construction of this project, might be relocated or replaced by a new utility facility during the construction of this project, or might not require adjustment and may remain in its current location. The Contractor shall contact each utility owner and confirm the status of all existing and new utility facilities. The utility contact information is provided elsewhere in the plans or bidding documents.

# ESTIMATE OF QUANTITIES AND NOTES

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0906(00)264	3	12

## TEMPORARY TRAFFIC CONTROL

Removing, relocating, covering, salvaging and resetting of existing traffic control devices, including delineation, shall be the responsibility of the Contractor. The Contractor shall coordinate with the Engineer to determine which signs will be reset and to verify reset locations. Cost for this work shall be incidental to the contract unit prices for the various items unless otherwise specified in the plans. Any delineators and signs damaged or lost shall be replaced by the Contractor at no cost to the State.

Vehicles and/or equipment used to accomplish the contract work shall be equipped with working flashing yellow warning lights when entering, leaving, or working in the roadway.

## REMOVE CONCRETE SIDEWALK

The bid item Remove Concrete Sidewalk shall include all materials, tools, and labor necessary to remove the concrete sidewalk.

It is the Contractor responsibility to dispose of the concrete sidewalk.

Any areas disturbed during the removal of concrete sidewalk shall be shaped with topsoil, seeded and spread with fertilizer.

All costs for topsoil, seed & fertilizer shall be incidental to the contract unit price for "Remove Concrete Sidewalk".

## 4" CONCRETE SIDEWALK

The bid item 4" Concrete Sidewalk shall include all materials, tools, and labor necessary to install the concrete path.

Subgrade within cut sections shall be scarified and recompact prior to placing granular cushion material.

Furnishing and installation of granular cushion material shall be incidental to the contract unit price per square foot 4" Concrete Sidewalk.

Any areas disturbed during the construction of 4" concrete sidewalk shall be shaped with topsoil, seeded and spread with fertilizer.

All costs for topsoil, seed & fertilizer shall be incidental to the contract unit price for "4" Concrete Sidewalk".

## MODIFY SPRINKLER SYSTEM

The bid item Modify Sprinkler System shall include all materials, tools, and labor necessary to modify sprinkler system where disturbed.

Any disturbed sprinkler heads or lines shall be moved or replaced as determined by the Engineer.

## PREFABRICATED CONCRETE BENCH

Provide prefabricated concrete benches in locations identified on plan equal to:

Classic Precast Concrete Park Bench  
Manufactured by Belson Outdoors  
72"L x 20"W x 18" H  
Bench shall be made with Portland cement (ASTM C150), Aggregate (ASTM C33), reinforced with 3/8" diameter steel rebar.  
Provide Stainless Steel Skate edging  
Color – Standard White

## PERMANENT SEEDING

The areas to be seeded consist of all newly graded areas within the project limits except for the top of roadways and temporary easements under cultivation.

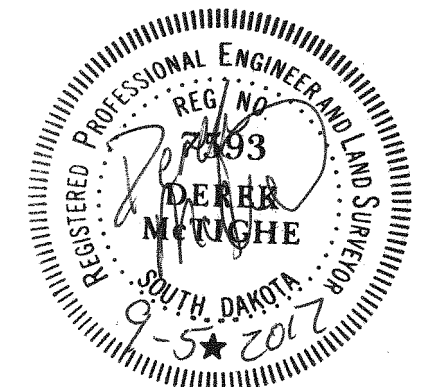
Lawn and turf seed, such as the Type D Permanent Seed Mixture, shall be tested within 12 months prior to planting, exclusive of the calendar month in which the test was completed.

Type D Permanent Seed Mixture shall 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	Fulfs, Fulfs II, Quill, Salty	1.4
Total:		7

## FERTILIZING

A commercial fertilizer with a minimum guaranteed analysis of 13-13-13, 18-46-0, 11-52-0, or an approved alternate fertilizer sold for use as a lawn starter fertilizer shall be applied to all areas designated for permanent seeding. The application rate of fertilizer shall be 3 pounds per 1000 square feet.



# EXISTING TOPOGRAPHY SYMBOLOGY AND LEGEND

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0906(00)264	4	12

Plotting Date: 8/31/2017

Plot Scale - 1:200

Plotted From - Justin

Anchor		Hedge		Shrub Tree	
Antenna		Highway R.O.W. Marker		Sidewalk	
Approach		Interstate Close Gate		Sign Face	
Assumed Corner		Iron Pin		Sign Post	
Azimuth Marker		Irrigation Ditch		Slough Or Marsh	
BBQ Grill/ Fireplace		Lake Edge		Spring	
Bearing Tree		Lawn Sprinkler		Stream Gauge	
Bench Mark		Mailbox		Street Marker	
Box Culvert		Manhole Electric		Subsurface Utility Exploration Test Hole	
Bridge		Manhole Gas		Telephone Fiber Optics	
Brush		Manhole Misc		Telephone Junction Box	
Buildings		Manhole Sanitary Sewer		Telephone Pole	
Bulk Tank		Manhole Storm Sewer		Television Cable Jct Box	
Cattle Guard		Manhole Telephone		Television Tower	
Cemetery		Manhole Water		Test Wells/Bore Holes	
Centerline		Merry-Go-Round		Traffic Signal	
Cistern		Microwave Radio Tower		Trash Barrel	
Clothes Line		Misc. Line		Tree Belt	
Commercial Sign Double Face		Misc. Property Corner		Tree Coniferous	
Commercial Sign One Post		Misc. Post		Tree Deciduous	
Commercial Sign Overhead		Overhang Or Encroachment		Tree Stumps	
Commercial Sign Two Post		Overhead Utility Line		Triangulation Station	
Concrete Symbol		Parking Meter		Underground Electric Line	
Creek Edge		Pipe With End Section		Underground Gas Line	
Curb/Gutter		Pipe With Headwall		Underground High Pressure Gas Line	
Curb		Pipe Without End Section		Underground Sanitary Sewer	
Dam Grade/Dike/Levee		Playground Slide		Underground Storm Sewer	
Deck Edge		Playground Swing		Underground Tank	
Ditch Block		Power And Light Pole		Underground Telephone Line	
Doorway Threshold		Power And Telephone Pole		Underground Television Cable	
Drainage Profile		Power Meter		Underground Water Line	
Drop Inlet		Power Pole		Warning Sign One Post	
Edge Of Asphalt		Power Pole And Transformer		Warning Sign Two Post	
Edge Of Concrete		Power Tower Structure		Water Fountain	
Edge Of Gravel		Propane Tank		Water Hydrant	
Edge Of Other		Property Pipe		Water Hydrant	
Edge Of Shoulder		Property Pipe With Cap		Water Meter	
Elec. Trans./Power Jct. Box		Property Stone		Water Tower	
Fence Barbwire		Public Telephone		Water Valve	
Fence Chainlink		Railroad Crossing Signal		Water Well	
Fence Electric		Railroad Milepost Marker		Weir Rock	
Fence Misc.		Railroad Profile		Windmill	
Fence Rock		Railroad R.O.W. Marker		Wingwall	
Fence Snow		Railroad Signs		Witness Corner	
Fence Wood		Railroad Switch			
Fence Woven		Railroad Track		State and National Line	
Fire Hydrant		Railroad Trestle		County Line	
Flag Pole		Rebar		Section Line	
Flower Bed		Rebar With Cap		Quarter Line	
Gas Valve Or Meter		Reference Mark		Sixteenth Line	
Gas Pump Island		Regulatory Sign One Post		Property Line	
Grain Bin		Regulatory Sign Two Post		Construction Line	
Guardrail		Retaining Wall		R. O. W. Line	
Guide Sign One Post		Riprap		New R. O. W. Line	
Guide Sign Two Post		River Edge		Cut and Fill Limits	
Gutter		Rock And Wire Baskets		Control of Access	
Guy Pole		Rockpiles		New Control of Access	
Haystack		Satellite Dish		Proposed ROW (After Property Disposal)	
		Septic Tank			

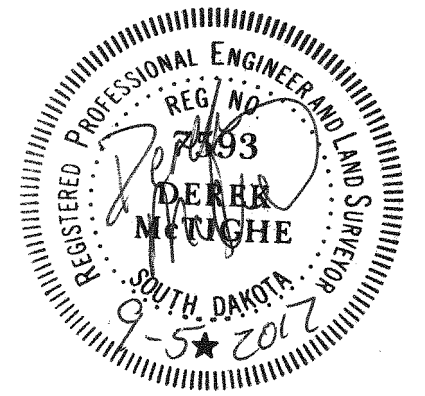
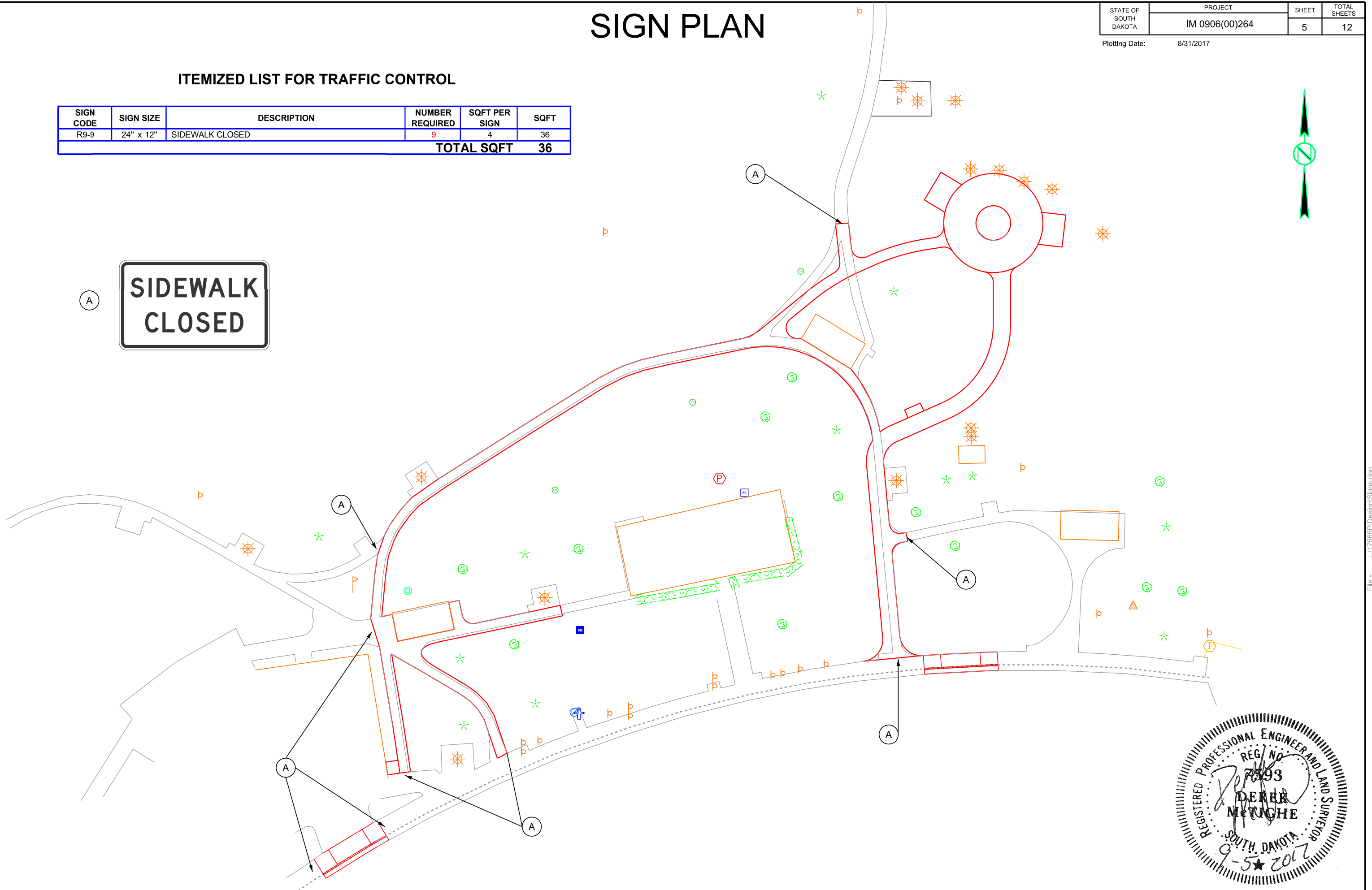
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# SIGN PLAN

STATE OF SOUTH DAKOTA	PROJECT IM 0906(00)264	SHEET 5	TOTAL SHEETS 12
Plotting Date: 8/31/2017			

## ITEMIZED LIST FOR TRAFFIC CONTROL

SIGN CODE	SIGN SIZE	DESCRIPTION	NUMBER REQUIRED	SQFT PER SIGN	SQFT
R9-9	24" x 12"	SIDEWALK CLOSED	9	4	36
<b>TOTAL SQFT</b>					<b>36</b>



Plot Scale - 1:40

Plotted From - Justin

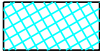
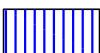
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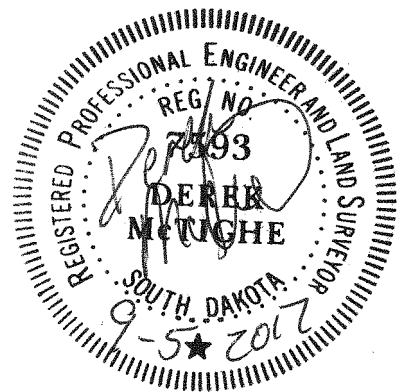
# REMOVALS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0906(00)264	6	12

Plotting Date: 8/31/2017



-  Remove Concrete Sidewalk
-  Remove Concrete Curb and Gutter



Plot Scale - 1:40

Plotted From - Justin

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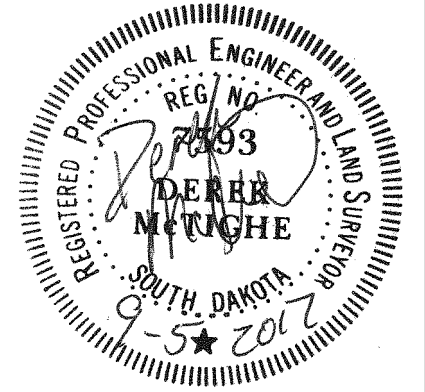
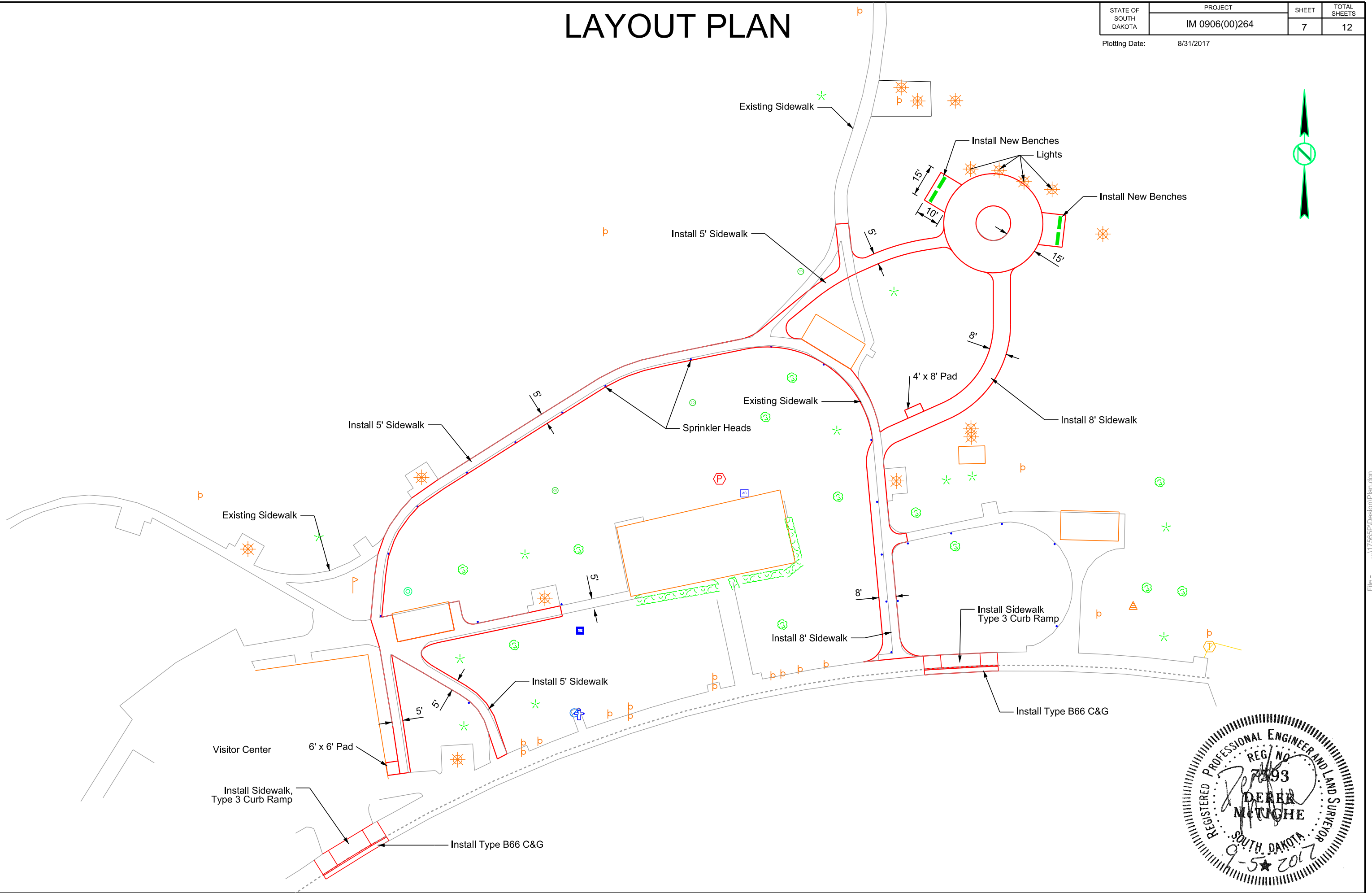
# LAYOUT PLAN

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0906(00)264	7	12
Plotting Date: 8/31/2017			

Plot Scale - 1:40

Plotted From - Justin

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

Only the traffic control devices controlling pedestrian flows are shown. Other devices may be needed to control traffic on the streets. Use lane closure signing or ROAD NARROWS signs, as needed.

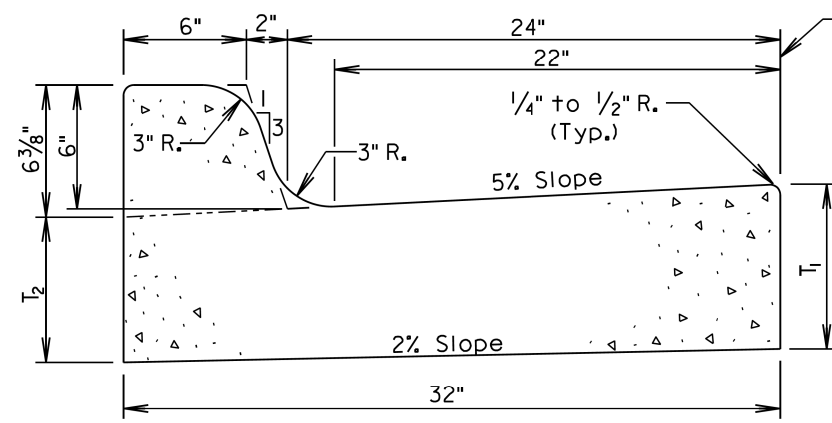
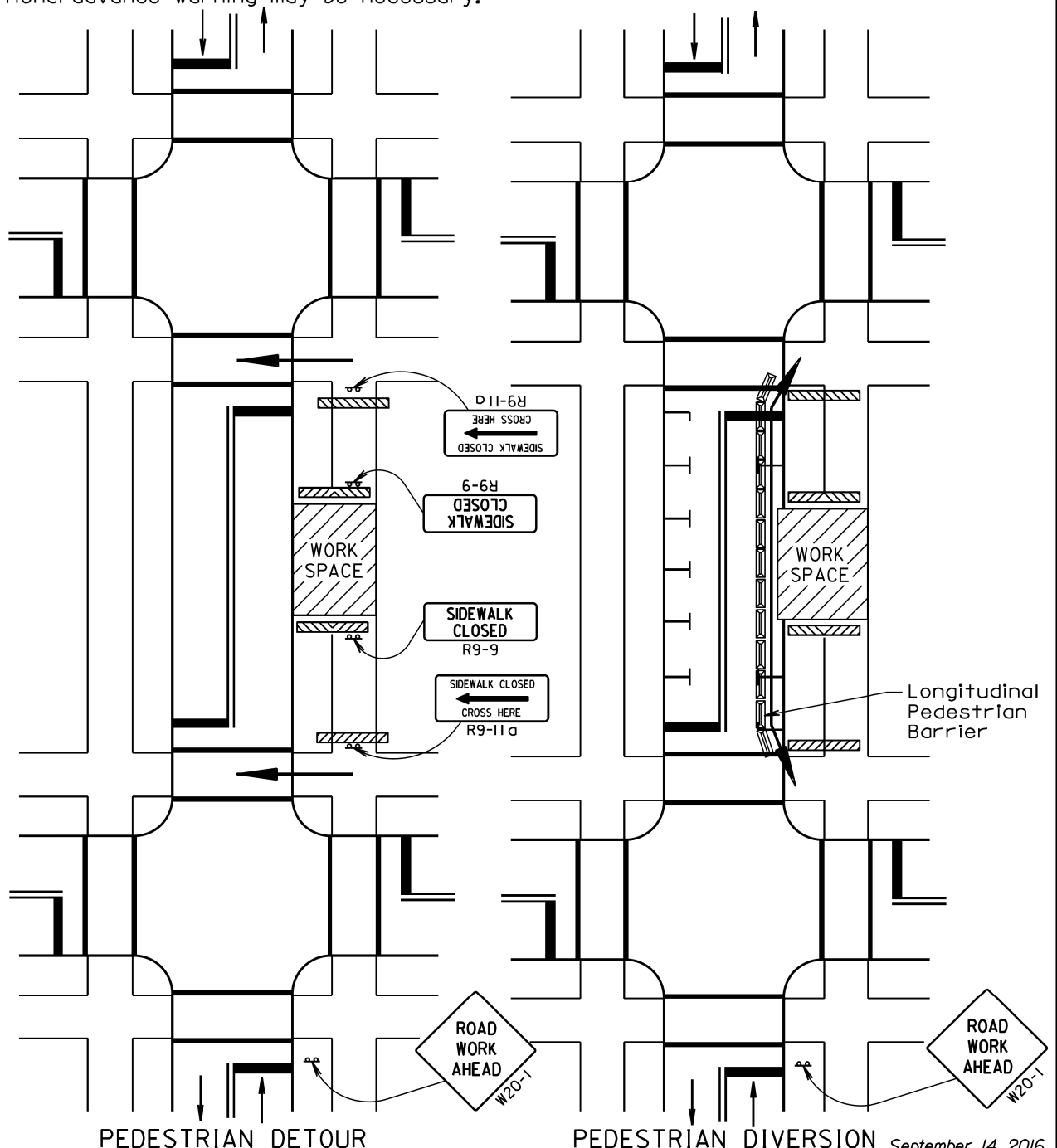
Signs may be placed along a temporary diversion to guide or direct pedestrians. Examples include KEEP RIGHT and KEEP LEFT signs.

Additional advance warning may be necessary.

For nighttime closures, Type A flashing warning lights may be used on barricades supporting signs and closing sidewalks. Type C steady-burn lights may be used on channelizing devices separating the temporary pedestrian diversion from vehicular traffic.

Street lighting should be considered.

 Longitudinal Pedestrian Barricade  
 and  




The stated radii on the plans and cross sections refer to this line and it shall also be the basis for horizontal linear foot measurement and payment.

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

**GENERAL NOTES:**

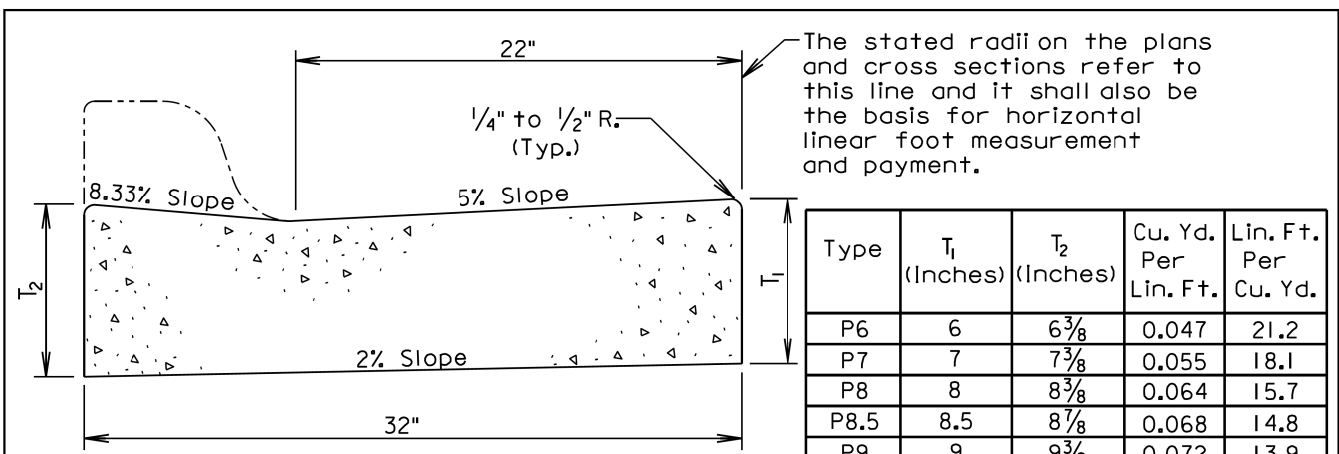
When concrete curb and gutter longitudinally adjoins new concrete pavement, the method of attachment shall be by one of the methods shown on Standard Plate 380.11.

See Standard Plate 650.90 for expansion and contraction joints in the curb and gutter.

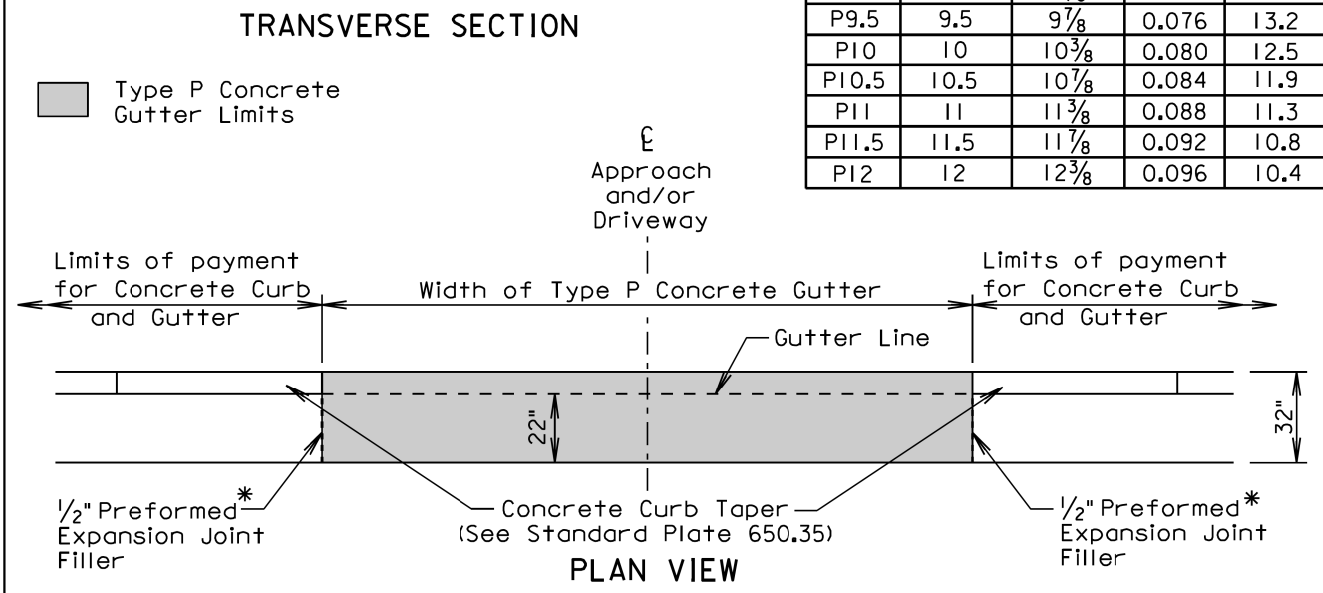
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Type	T <sub>1</sub> (Inches)	T <sub>2</sub> (Inches)	Cu. Yd. Per Lin. Ft.	Lin. Ft. Per Cu. Yd.
P6	6	6 <sup>3</sup> / <sub>8</sub>	0.047	21.2
P7	7	7 <sup>3</sup> / <sub>8</sub>	0.055	18.1
P8	8	8 <sup>3</sup> / <sub>8</sub>	0.064	15.7
P8.5	8.5	8 <sup>7</sup> / <sub>8</sub>	0.068	14.8
P9	9	9 <sup>3</sup> / <sub>8</sub>	0.072	13.9
P9.5	9.5	9 <sup>7</sup> / <sub>8</sub>	0.076	13.2
P10	10	10 <sup>3</sup> / <sub>8</sub>	0.080	12.5
P10.5	10.5	10 <sup>7</sup> / <sub>8</sub>	0.084	11.9
P11	11	11 <sup>3</sup> / <sub>8</sub>	0.088	11.3
P11.5	11.5	11 <sup>7</sup> / <sub>8</sub>	0.092	10.8
P12	12	12 <sup>3</sup> / <sub>8</sub>	0.096	10.4



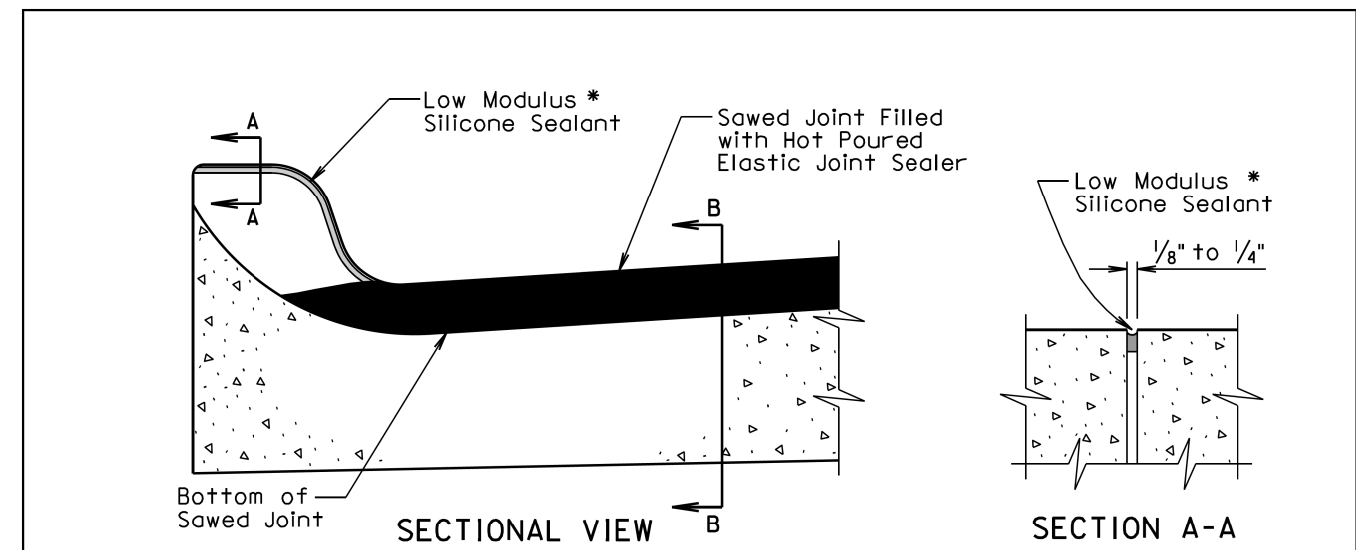
\* Joint will not be needed if concrete curb and gutter and type P concrete gutter is placed at the same time. If the 1/2" Preformed Expansion Joint Filler is provided, then the joint shall be sealed in accordance with Standard Plate 650.90.

**GENERAL NOTES:**  
 The concrete for the Type P Concrete Gutter shall comply with the requirements of the Specifications for Class M6 Concrete.  
 When concrete gutter longitudinally adjoins new concrete pavement, the method of attachment shall be by one of the methods shown on Standard Plate 380.11.  
 Transverse contraction joints shall be constructed at 10' intervals in the concrete gutter except when concrete gutter is constructed adjacent to mainline PCC pavement. When concrete gutter is constructed adjacent to mainline PCC pavement, a transverse contraction joint shall be constructed in the concrete gutter at each mainline PCC pavement transverse contraction joint location.  
 When concrete gutter is placed monolithically with mainline PCC pavement, the transverse contraction joints in the concrete gutter shall be sawed and sealed the same as the transverse contraction joints in the mainline PCC pavement.  
 When concrete gutter is not placed monolithically with the mainline PCC pavement and when the adjacent mainline surfacing is not PCC concrete, the transverse contraction joints in the concrete gutter shall be 1/2 inches deep if formed in the fresh concrete using a suitable grooving tool. If a saw is used to cut the contraction joints, then the depth of the joint shall be at least 1/4 the thickness of the concrete.

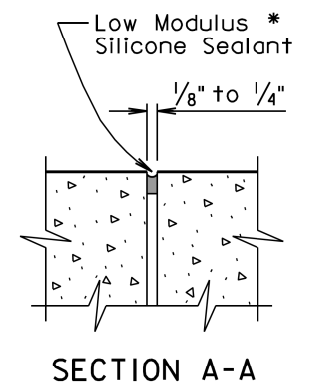
June 26, 2015

<b>SDOT</b>	<b>TYPE P CONCRETE GUTTER</b>	<b>PLATE NUMBER</b> 650.30
		Sheet 1 of 1

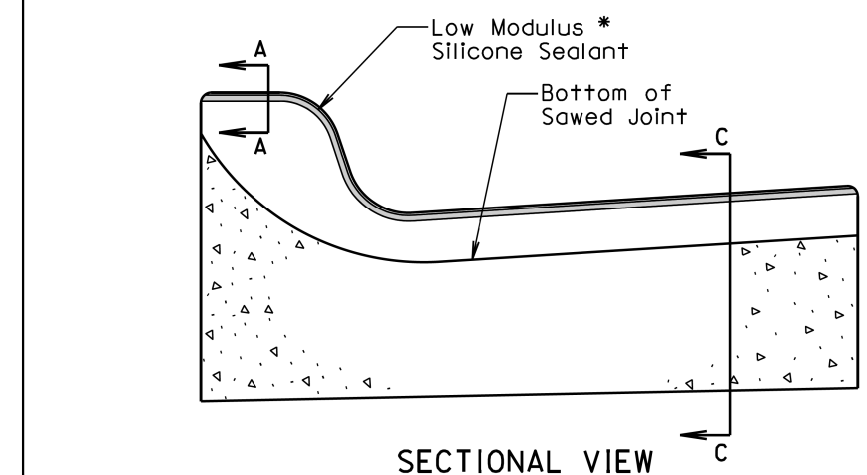
Published Date: 3rd Qtr. 2017



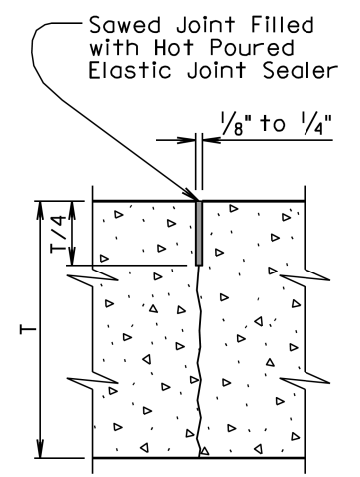
SECTIONAL VIEW  
 (Curb and Gutter Placed Monolithically with Adjacent Mainline PCC Pavement)



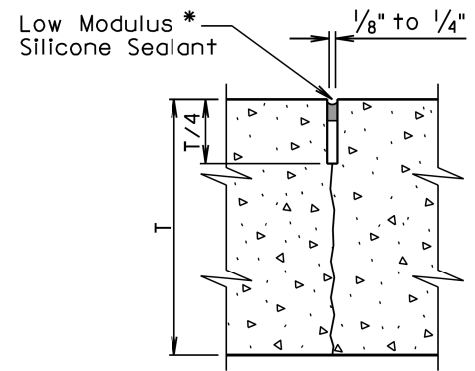
SECTION A-A



SECTIONAL VIEW  
 (Curb and Gutter not Placed Monolithically with Adjacent Mainline PCC Pavement or Mainline Surfacing is not PCC Pavement)



SECTION B-B



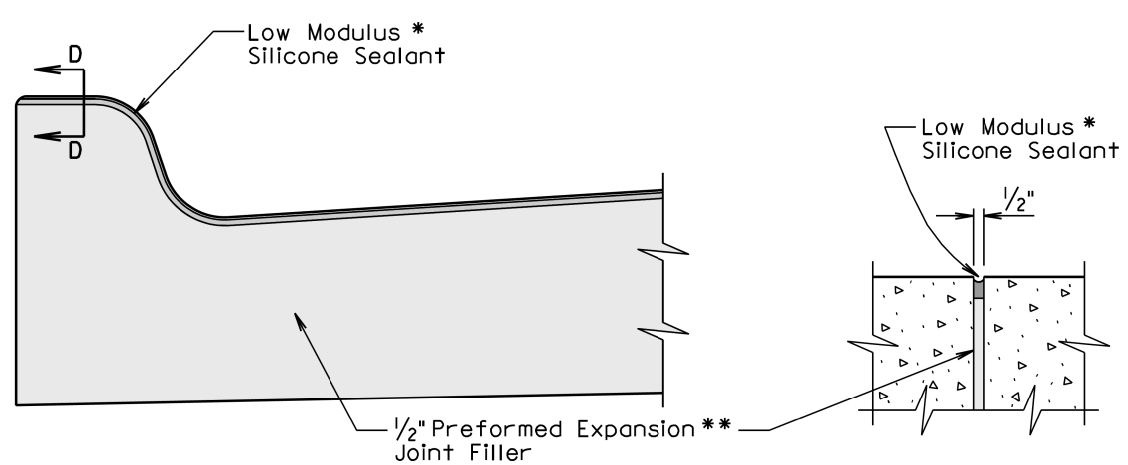
SECTION C-C

\* The silicone sealant shall be placed such that it completely seals the joint and is bonded to the sides of the clean joint as approved by the Engineer.

September 6, 2013

<b>SDOT</b>	<b>JOINTS IN CONCRETE CURB AND GUTTER</b>	<b>PLATE NUMBER</b> 650.90
		Sheet 1 of 2

Published Date: 3rd Qtr. 2017



**SECTIONAL VIEW**  
(Curb and Gutter at 1/2" Preformed Expansion Joint Filler Location)

**SECTION D-D**

\* The silicone sealant shall be placed such that it completely seals the joint and is bonded to the sides of the clean joint as approved by the Engineer.

**GENERAL NOTES:**

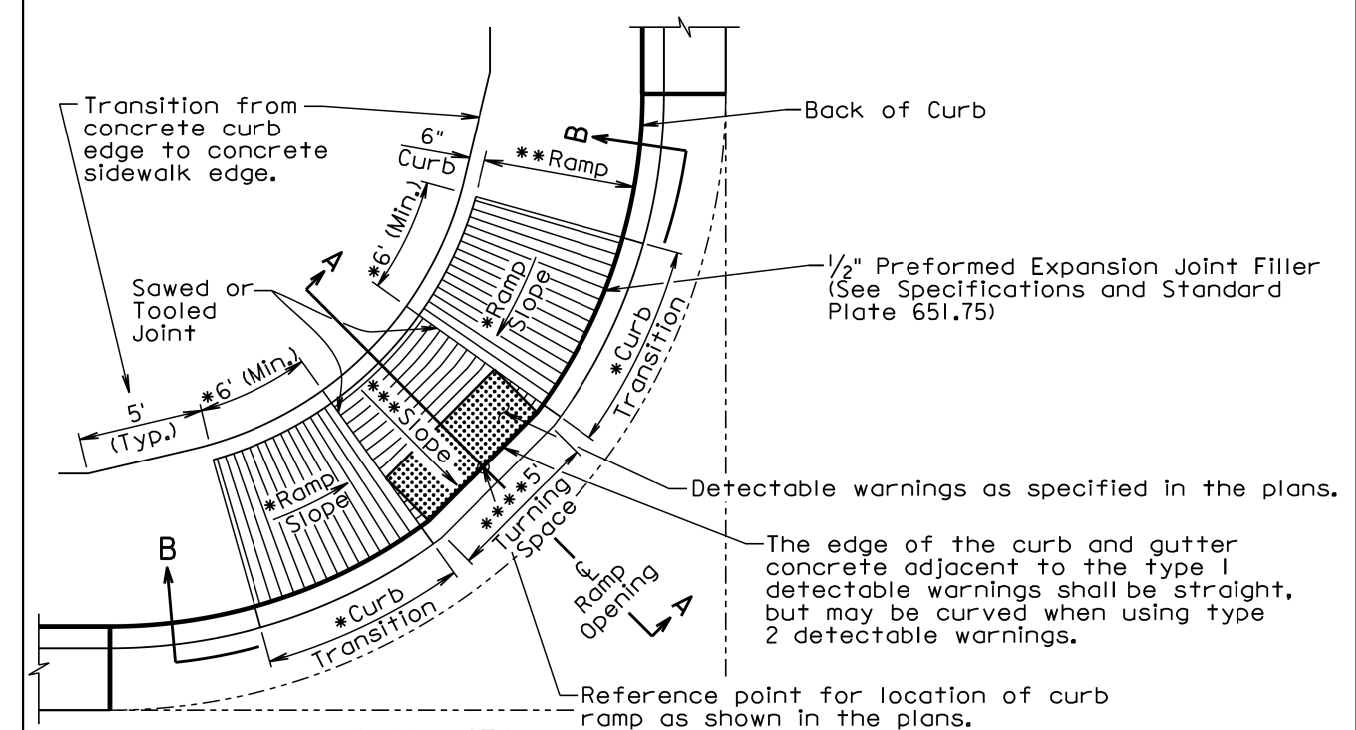
- For illustrative reason, only the type B curb and gutter is shown.
- \*\* A 1/2" preformed expansion joint filler shall be placed transversely in the curb and gutter at the following locations:
1. At each junction between the radius return of curb and gutter and curb and gutter which is parallel to the project centerline.
  2. At each junction between new curb and gutter and existing curb and gutter.

Transverse contraction joints shall be constructed at 10' intervals in the concrete curb and gutter except when the concrete curb and gutter is constructed adjacent to mainline PCC pavement. When concrete curb and gutter is constructed adjacent to mainline PCC pavement, a transverse contraction joint shall be constructed in the concrete curb and gutter at each mainline PCC pavement transverse contraction joint location.

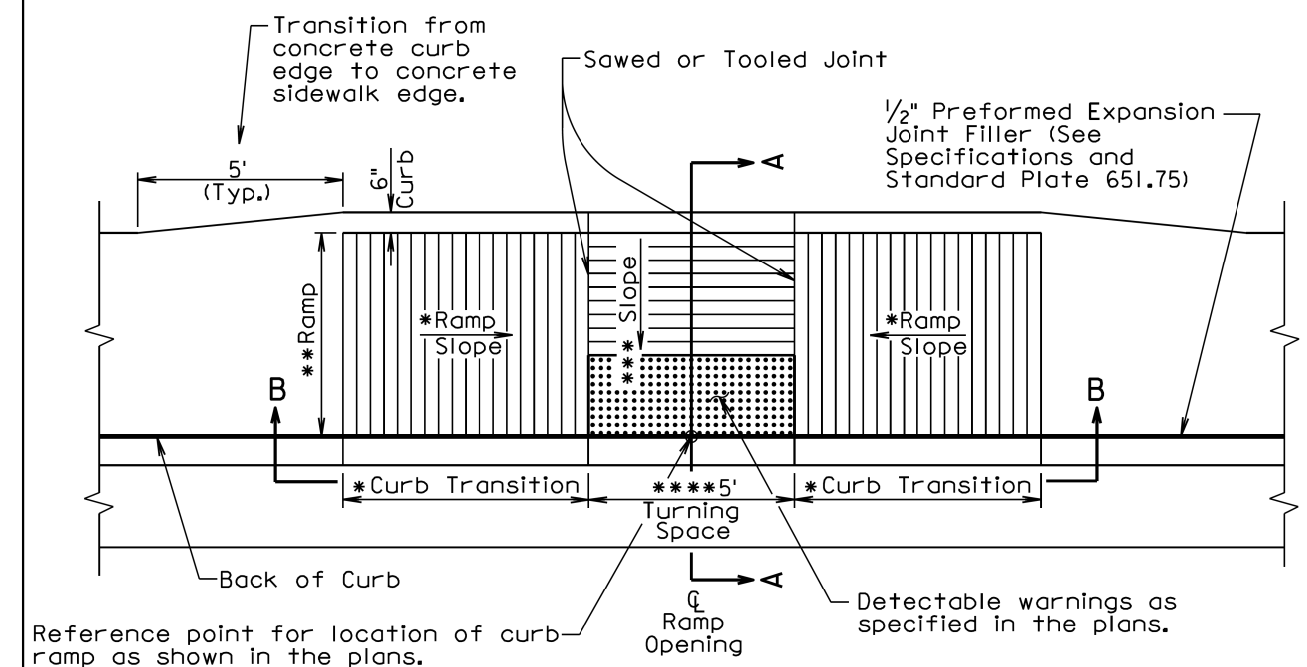
When concrete curb and gutter is not placed monolithically with the mainline PCC pavement or when the adjacent mainline surfacing is not PCC concrete, the transverse contraction joints in the concrete curb and gutter shall be 1/2 inches deep if formed in the fresh concrete using a suitable grooving tool. If a saw is used to cut the contraction joints, then the depth of the joint shall be at least 1/4 the thickness of the concrete and the joint shall be sealed in accordance with the details shown above.

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			Sheet 2 of 2



**PLAN VIEW**  
(With Curved Curb and Gutter)



**PLAN VIEW**  
(With Straight Curb and Gutter)

September 6, 2015

Published Date: 3rd Qtr. 2017	S D D O T	TYPE 3 CURB RAMP (PARALLEL CURB RAMP)	PLATE NUMBER 651.03
			Sheet 1 of 3

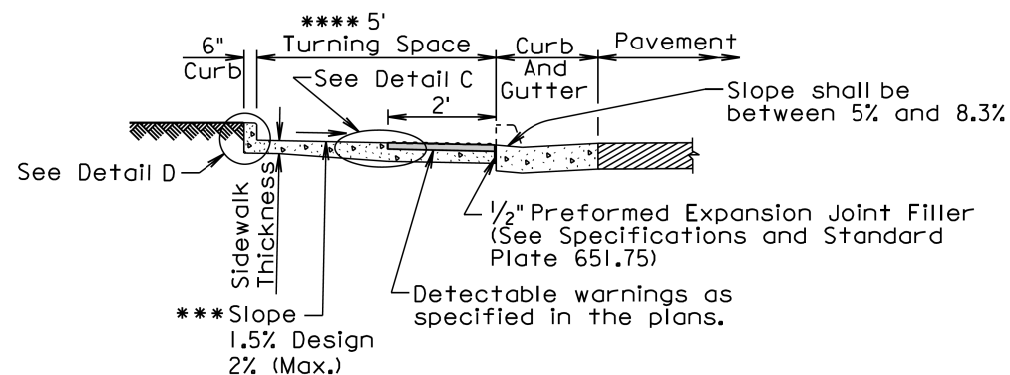
Plot Scale - 1:200

Plotted From - Justin

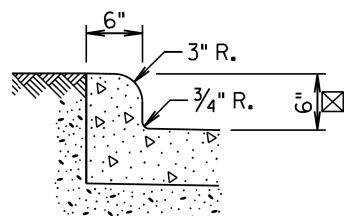
File - ...Design\Standard Plates.dgn

- \* The curb transition slope shall match the curb ramp slope. Curb ramp slopes are designed at 7.5% unless stated otherwise in the plans. The curb ramp may have a maximum slope of 8.3% at any location of the curb ramp and shall not exceed 15' in length unless stated otherwise in the plans. The curb transitions and curb ramp lengths shall be adjusted as necessary to meet all slope and length requirements based on field geometrics.
- \*\* The cross slope of the ramp shall not be steeper than 2% and the ramp width is 5' unless stated otherwise in the plans. Plans are designed using a 1.5% cross slope for the ramp unless stated otherwise in the plans.
- \*\*\* The slope in the turning space shall not be steeper than 2% in any direction of pedestrian travel. Plans are designed using a 1.5% slope unless stated otherwise in the plans.
- \*\*\*\* The turning space is 5' x 5' unless stated otherwise in the plans.

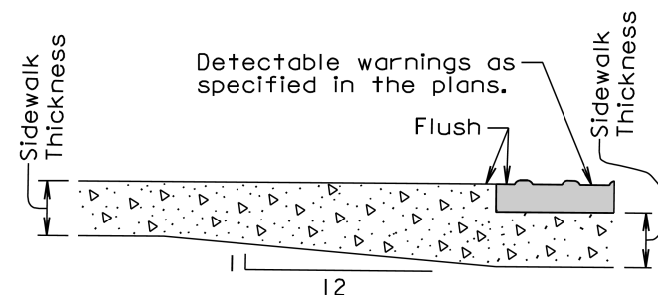
☑ The curb height shall be 6" unless stated otherwise in the plans.



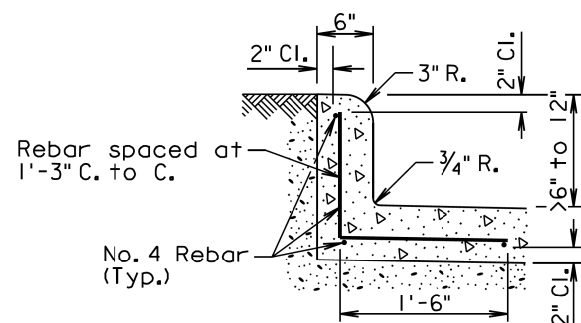
SECTION A-A



DETAIL D

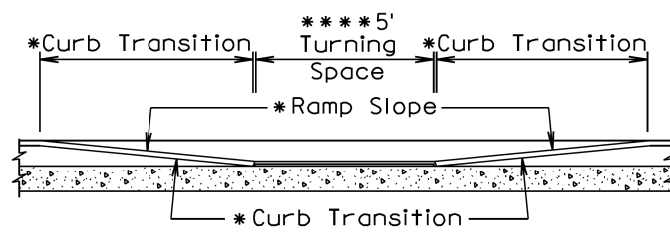


DETAIL C



DETAIL D

(Use this detail when the curb height is greater than 6" and less than 12")



SECTIONAL VIEW B-B

September 6, 2015

<b>S D D O T</b>	<b>TYPE 3 CURB RAMP (PARALLEL CURB RAMP)</b>	PLATE NUMBER <b>651.03</b>
		Sheet 2 of 3

Published Date: 3rd Qtr. 2017

**GENERAL NOTES:**

For illustrative purpose only, type 1 detectable warnings are shown in the drawings.

For illustrative purpose only, a PCC fillet section is shown in one of the drawings. The curb ramp depicted on this standard plate may be used with a PCC fillet section or with curb and gutter.

The curb ramp shall be placed at the location stated in the plans.

Sidewalk adjacent to the curb ramp shall be as shown in the plans.

Care shall be taken to ensure a uniform grade on the curb ramp, free of sags and short grade changes.

Surface texture of the curb ramp shall be obtained by coarse brooming transverse to the slope of the curb ramp.

The normal gutter line profile shall be maintained through the area of the ramp opening.

Joints shall be sawed or tooled into the concrete adjacent to the detectable warnings to alleviate possible corner cracking (see plan view for joint location).

Care shall be taken to ensure that the surface of the detectable warnings are clean and maintains a uniform color.

The detectable warnings shall be cut as necessary to fit the plan specified limits of the detectable warnings. Cost for cutting the detectable warnings shall be incidental to the corresponding detectable warning bid item.

When curb height is greater than 6" and less than 12", reinforcing steel is required in accordance with the detail on sheet 2 of 3. The reinforcing steel shall conform to ASTM A615, Grade 60. Cost for furnishing and installing the reinforcing steel shall be incidental to the contract unit price per square foot for the corresponding concrete sidewalk bid item.

There will be no separate payment for curb ramps. The curb ramp shall be measured and paid for at the contract unit price per square foot for the corresponding concrete sidewalk bid item. The square foot area of the detectable warnings and the curb along the short radius shall be included in the measured and paid for quantity of sidewalk.

The curb transitions and ramp opening shall be measured and paid for at the contract unit price per foot for the corresponding curb and gutter bid item when curb and gutter is used. The curb transitions and ramp opening shall be measured and paid for at the contract unit price per square yard for the corresponding PCC fillet section bid item when a PCC fillet section is used.

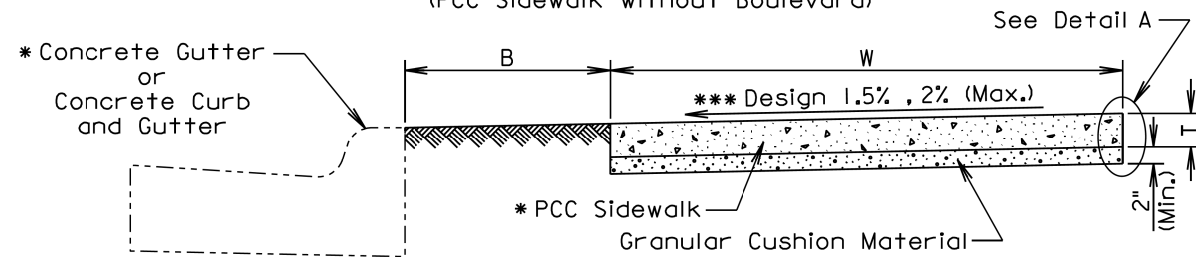
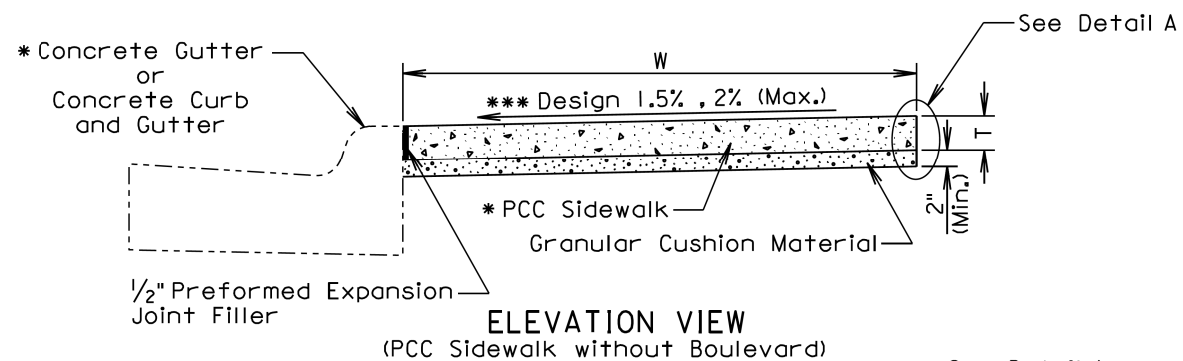
The type 1 detectable warnings shall be measured to the nearest square foot. All costs for furnishing and installing the type 1 detectable warnings including labor, equipment, materials, and incidentals shall be paid for at the contract unit price per square foot for "Type 1 Detectable Warnings".

The type 2 detectable warnings shall be measured to the nearest square foot. All costs for furnishing and installing the type 2 detectable warnings including labor, equipment, and materials, including adhesive, necessary sealant or grout, and necessary grinding shall be paid for at the contract unit price per square foot for "Type 2 Detectable Warnings".

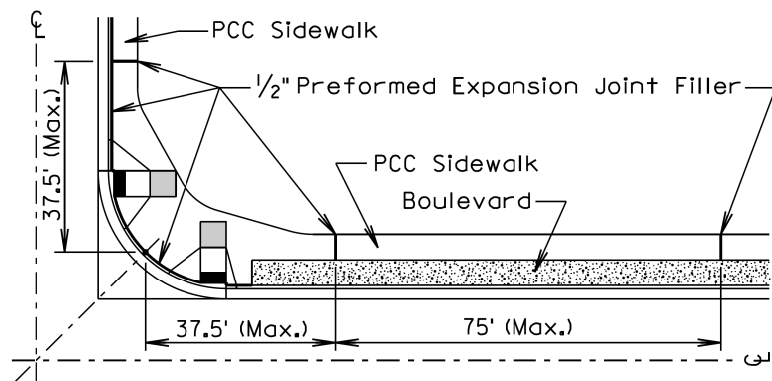
September 6, 2015

<b>S D D O T</b>	<b>TYPE 3 CURB RAMP (PARALLEL CURB RAMP)</b>	PLATE NUMBER <b>651.03</b>
		Sheet 3 of 3

Published Date: 3rd Qtr. 2017



- 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 shall 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% unless specified otherwise in the plans.

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

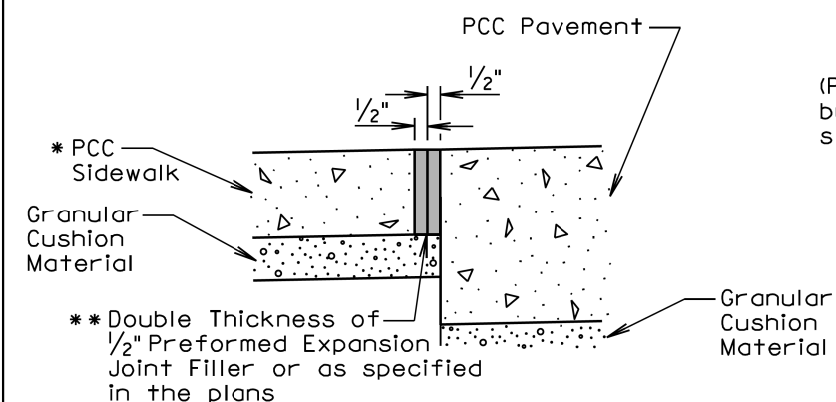
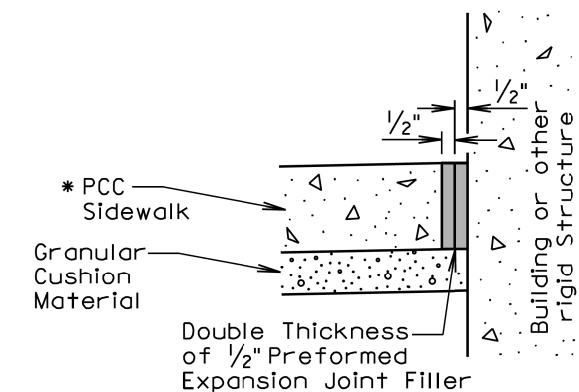
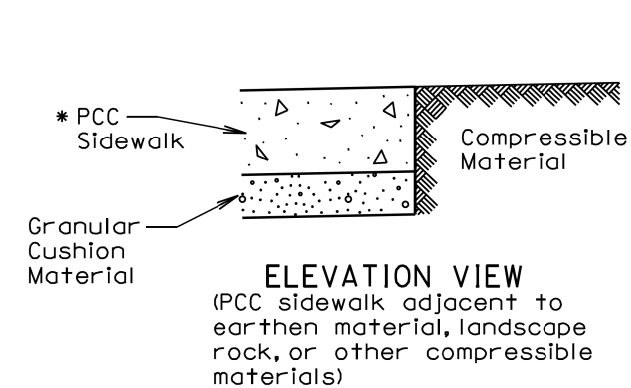
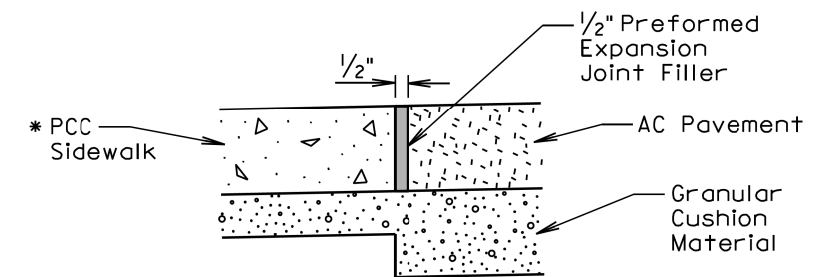
PCC sidewalk placed adjacent to intersection of roadways shall have an expansion joint placed transversely a maximum of 37.5 feet from the intersection. See PLAN VIEW.

An expansion joint in PCC sidewalk shall 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 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 shall construct the joint treatment in accordance with the plans.

September 6, 2015

<b>SDOT</b>	<b>PCC SIDEWALK</b>	PLATE NUMBER <b>651.75</b>
	<i>Published Date: 3rd Qtr. 2017</i>	Sheet 1 of 2


**Detail A**  
(Use Appropriate Detail(s))

September 6, 2015

<b>SDOT</b>	<b>PCC SIDEWALK</b>	PLATE NUMBER <b>651.75</b>
	<i>Published Date: 3rd Qtr. 2017</i>	Sheet 2 of 2