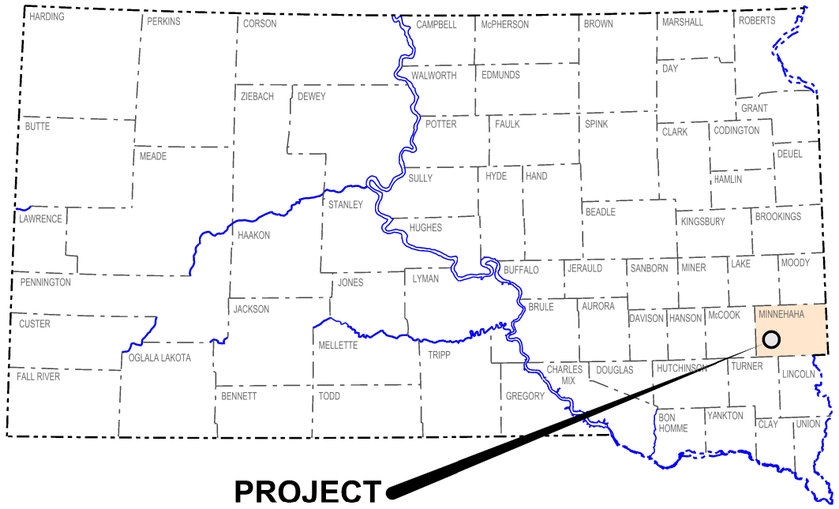


STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

PROJECT 038–271
SD HIGHWAY 38
MINNEHAHA COUNTY

ADA IMPROVEMENTS &
REMOVE/RESET SIGN
PCN I51T

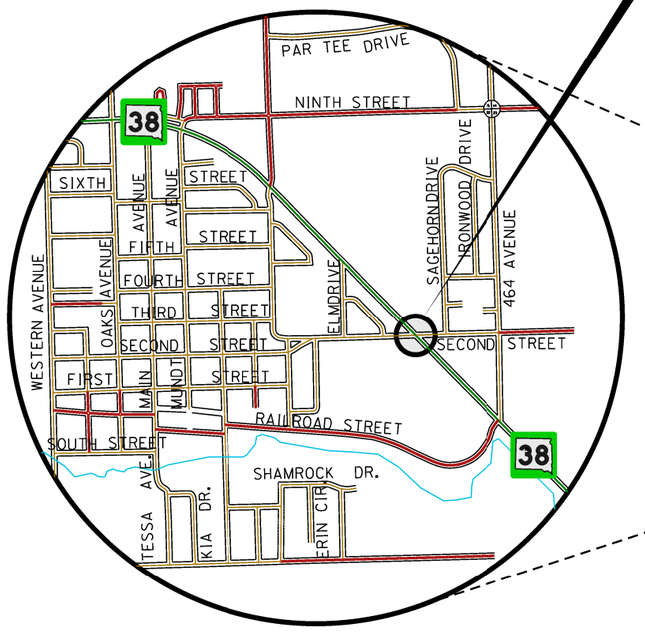
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	038-271	1	12

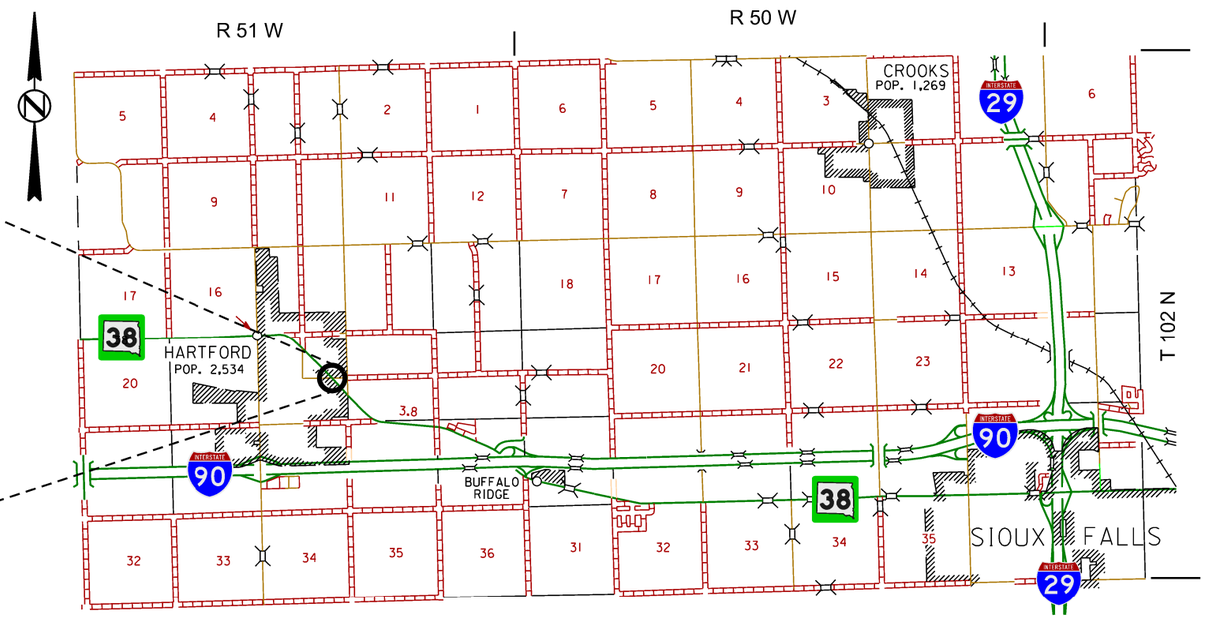
Plotting Date: 03/29/2018

INDEX OF SHEETS

INTERSECTION
SD HWY 38 & 2ND ST
MRM 357.17
MILEAGE 56.802

CITY OF HARTFORD





ADT (2017) 3,317

STORM WATER PERMIT
(None required)

ESTIMATE OF QUANTITIES & ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	038-271	2	12

ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
110E1140	Remove Concrete Sidewalk	24.5	SqYd
110E1540	Remove Luminaire Pole Footing	1	Each
110E7150	Remove Sign for Reset	1	Each
632E3500	Reset Sign	1	Each
634E0110	Traffic Control Signs	165.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E2000	Longitudinal Pedestrian Barricade	15	Ft
634E2015	Temporary Pedestrian Access Route	Lump Sum	LS
635E5020	2' Diameter Footing	6.0	Ft
651E0040	4" Concrete Sidewalk	210	SqFt
651E7000	Type 1 Detectable Warnings	18	SqFt
734E0010	Erosion Control	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

The SDDOT is committed to protecting the environment and uses Section A 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. 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: http://www.sddot.com/resources/Manuals/EnvironProcManual.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 Office at 605-773-3098 or 605-773-4336 to determine whether an environmental analysis and/or resource agency coordination is necessary.

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 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 Environment 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 completely 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 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.

Cost 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: 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 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 of 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 will immediately cease and the Project Engineer will be immediately notified. The Project Engineer will contact the SDDOT Environmental Office 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 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.

SCOPE OF WORK

Work on this project involves sidewalk removal, minor grading, sidewalk placement, resetting of flashing beacon sign (with new footing), and erosion control items for ADA improvements at the Hwy 38/2nd St intersection in Hartford.

The ADA improvements are necessary due to the existing sidewalk having improper slopes, the push button in the NE quadrant being too far from the crosswalk, the push buttons in the NE & NW quadrants being too far from the edge of concrete (> 10”), and areas with deviations in excess of ¼” when transitioning into the roadway.

SEQUENCE OF OPERATIONS

The following sequence of operations shall be adhered to. Any changes must be approved in writing by the Area Engineer prior to changes being made.

1. Install Traffic Control & Temporary Pedestrian Access Route
2. Remove Existing Concrete Sidewalk, Sign for Reset, & Sign Footing
3. Complete any Necessary Minor Grading
4. Install New Sidewalk with Type 1 Detectable Warnings and Sign Footing
5. Reset Sign
6. Remove Temporary Pedestrian Access Route
7. Compete Erosion Control & Remove Traffic Control

Work activities shall be conducted during daylight hours only.

TABLE OF SIDEWALK REMOVAL

Quadrant	Quantity (SqYd)
NE	10.7
NW	13.8
Total:	24.5

REMOVE SIGN FOR RESET & RESET SIGN

The existing solar powered flashing beacon sign in the NE quadrant shall be removed and reset as per plan details. Anchor bolts shall be ¾” x 60” straight shape. Any damage to the sign occurring during relocation shall be repaired or require sign replacement by the Contractor at no cost to the state.

The push buttons on the solar powered flashing beacon signs in the NW and NE quadrants shall be reset so they align with the new landing/turning spaces. The maximum height above the concrete sidewalk shall be 42 inches and the maximum distance from the edge of sidewalk to the push buttons shall be 10 inches.

Cost involved with removing and resetting the existing beacon sign including obtaining any necessary hardware and anchors, realigning push buttons to proper locations, and removing and resetting sign sheeting shall be incidental to the contract unit price per each for Reset Sign. Only 1 Remove Sign for Reset and Reset sign shall be paid for on the project regardless push button work on the sign in the NW quadrant.

TEMPORARY PEDESTRIAN ACCESS ROUTE

A Temporary Pedestrian Access Route (TPAR) shall be provided when the current crosswalk is under construction. The TPAR shall consist of or a combination of packed gravel, plywood, PCCP, asphalt concrete or another approved hard surface that is smooth, continuous, and non-slip. The TPAR shall have a minimum width of 48” with a maximum cross slope of 2%.

The TPAR shall be kept free of any obstructions and hazards, such as holes, debris, mud, snow, construction equipment, traffic control signing, stored material, etc.

Cost associated with installing, maintaining and removing the Temporary Pedestrian Access Route shall be incidental to the contract lump sum price for Temporary Pedestrian Access Route.

LONGITUDINAL PEDESTRIAN BARRICADE

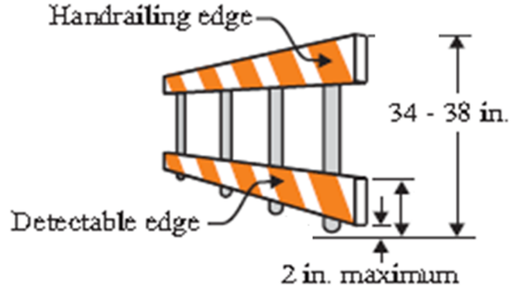
Barricade rail supports may not project into pedestrian routes more than 4 inches from the face of the barricade. To prevent any tripping hazard to pedestrians, ballast shall be located behind or internal to the device.

When Longitudinal Pedestrian Barricades are combined in a series, the maximum gap between devices that do not interlock shall be one inch. Joints between devices that do interlock shall 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.

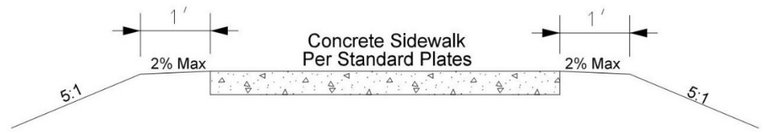
Longitudinal Pedestrian Barricade shall have continuous bottom and top surfaces. A gap height or opening from the walkway surface up to a maximum of 2 inches is allowed for drainage purposes. The top edge of the bottom portion shall be a minimum of 8 inches above the walkway. The top of the top portion shall be between 34 and 38 inches above the walkway. The top surface shall be smooth to allow safe hand trailing. Both upper and lower surfaces shall share a common vertical plane.

Included in the estimate of quantities is 15 feet of longitudinal pedestrian barricade (5 feet at 3 locations) to be used in the TPAR. Cost for supplying, placing and removing longitudinal Pedestrian Barricades shall be incidental to the contract unit price per foot for Longitudinal Pedestrian Barricade.



4” CONCRETE SIDEWALK

Minor grading will be necessary to assure the final slopes of the new sidewalk meet specifications. Any grading work necessary (including any necessary fill material) shall be incidental to the contract unit price per square foot for 4” Concrete Sidewalk. The final grade shall extend 1 foot on either side of the sidewalk at 2%, then beyond the 1 foot at a 5:1 or flatter slope.



Where concrete sidewalk is being placed adjacent to the asphalt concrete roadway, the asphalt concrete roadway shall be sawed full depth for any necessary removals. Any remaining voids due to forms shall be filled with hot-mixed asphalt upon completion of the sidewalk. Cost for sawing, removal and hot-mixed asphalt shall be incidental to the contract unit price per square foot for 4” Concrete Sidewalk.

Any staking/surveying required to place 4” concrete sidewalk or sign footings so that it meets standard and plan specifications shall be accomplished by the Contractor and shall be incidental to the contract unit price per square foot for 4” Concrete Sidewalk.

TABLE OF 4” CONCRETE SIDEWALK

Quadrant	Quantity (SqFt)
NE	106
NW	104
Total:	210

TABLE OF FOOTING DATA

Site Designation	Footing Diameter	* Footing Depth	**Spiral Diameter	**Spiral Length	Vertical Reinforcement
NE Quadrant	2’ - 0”	6’ - 0”	1’ - 8”	44’ - 3”	8-#7 x 5’ - 6”

* Footing depth shall be below ground level.
** The size of all spirals shall be #3.

REMOVE LUMINAIRE POLE FOOTING

The footing of the existing solar powered flashing beacon sign assembly in the NE corner shall be removed by the Contractor to a minimum of 2’ below the ground surface. Restoration of the disturbed area shall be to the satisfaction of the Engineer.

All costs for removing the footing shall be incidental to the contract unit price per each Remove Luminaire Pole Footing.

TYPE 1 DETECTABLE WARNINGS

Detectable warnings shall be in compliance with the Americans with Disabilities Act regulations.

The detectable warnings shall be installed according to the manufacturer's installation instructions.

A concrete thickness equal to the adjacent concrete sidewalk thickness and 2 inches of granular cushion material shall be placed below the Type 1 Detectable Warnings. When concrete is placed below the detectable warnings then the concrete thickness shall be transitioned at the rate of 1" per foot to match the adjacent concrete sidewalk thickness.

The detectable warnings shall be a brick red color for application in concrete curb ramps. Cast iron plates may be a natural patina (weathered steel).

When Type 1 Detectable Warnings are specified, the Contractor shall furnish and install only one of the products listed in the Type 1 Detectable Warnings table.

Type 1 Detectable Warnings

Product	Manufacturer
Detectable Warning Plate Cast Iron Plate	Neenah Foundry Company Neenah, WI 800-558-5075 http://www.neenahfoundry.com/
Detectable Warning Plate Cast Iron Plate	Deeter Foundry Lincoln, NE 800-234-7466 http://www.deeter.com/
Detectable Warning Plate Cast Iron Plate(No Coating)	East Jordan Iron Works, Inc. 301 Spring Street East Jordan, MI 49727 800-626-4653 http://www.ejiw.com

TABLE OF TYPE 1 DETECTABLE WARNINGS

Quadrant	Quantity (SqFt)
NE	8.0
NW	10.0
Total:	18.0

EROSION CONTROL

All disturbed areas (including the temporary pedestrian access route) shall be restored and stabilized upon completion of the project including placing additional topsoil, seeding, and erosion blanket.

If enough in-place topsoil cannot be salvaged, the Contractor will be required to furnish and place 4 inches of topsoil to transition the top of the new sidewalk into the surrounding ground.

Any furnished topsoil shall be free from clay lumps, stones, coarse gravel, or similar objects larger than 1/2 inch in diameter. Brush, stumps, roots, wood, objectionable weeds, litter, or any other material which may be harmful to plant growth will not be allowed. Organic material shall be decomposed.

Seed Mixture shall consist of the following type D mixture:

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

Type 2 Erosion control blanket shall be installed in all seeded/disturbed locations or as determined by the Engineer during construction. The erosion control blanket provided shall be from the approved product list. The approved product list for erosion control blanket may be viewed at the following internet site:

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

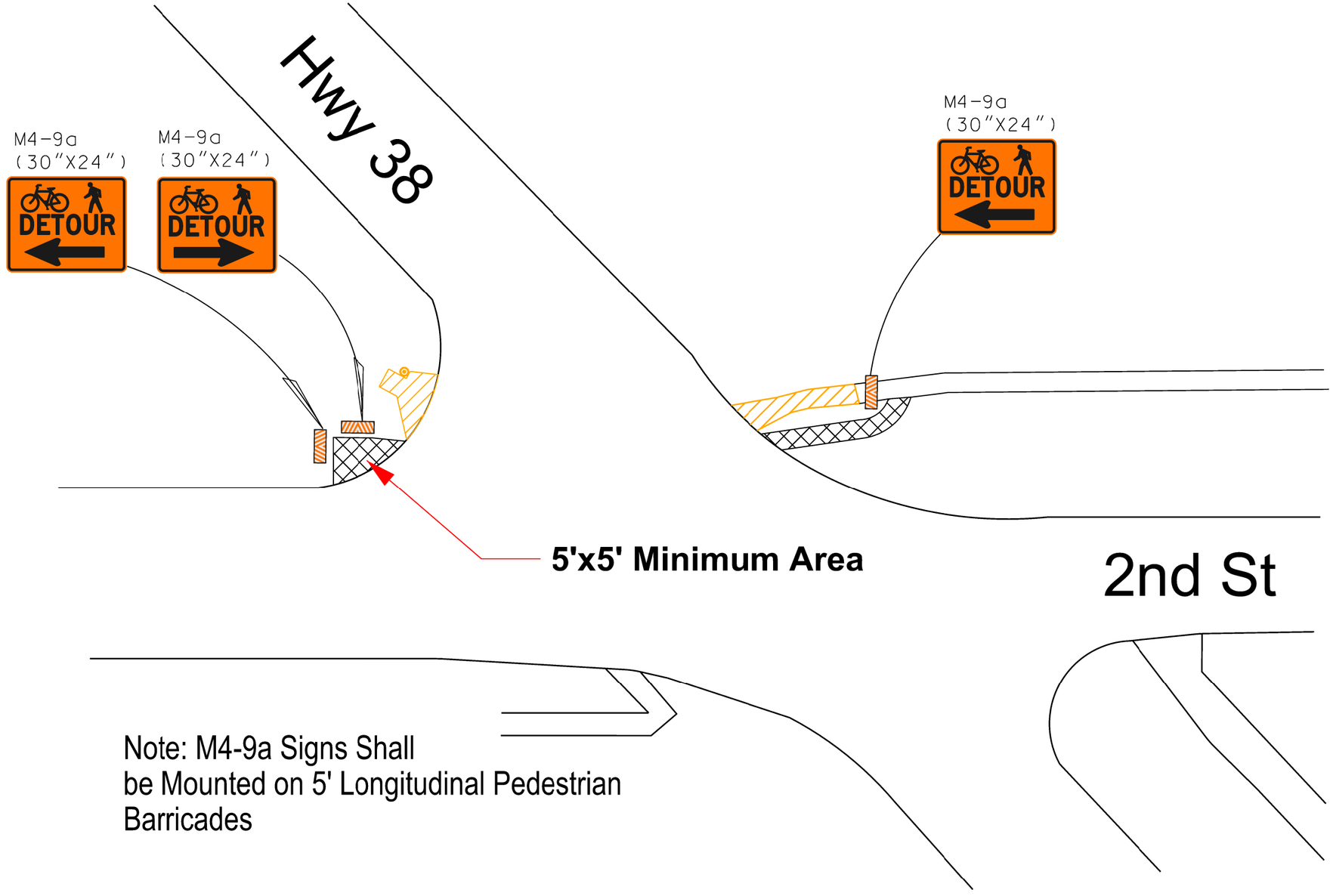
Cost for the erosion control work for furnishing, placing and maintaining erosion control material including equipment, labor, seed, topsoil and blanket shall be incidental to the contract lump sum price for Erosion Control.

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

		CONVENTIONAL ROAD			
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
S1-1	SCHOOL CROSSING	2	36" x 36"	9.0	18.0
W16-7P	DOWNWARD DIAGONAL ARROW (plaque)	2	24" x 12"	2.0	4.0
W20-1	ROAD WORK AHEAD	4	48" x 48"	16.0	64.0
W21-5	SHOULDER WORK	4	48" x 48"	16.0	64.0
M4-9a	BICYCLE & PEDESTRIAN DETOUR with ARROW (L or R)	3	30" x 24"	5.0	15.0
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT			165.0

S1-1 & W16-7P temporary signs have been included for use when the permanent crossing sign in the NE quadrant has been removed for reset (1 for each direction).

TEMPORARY PEDESTRIAN ACCESS ROUTE

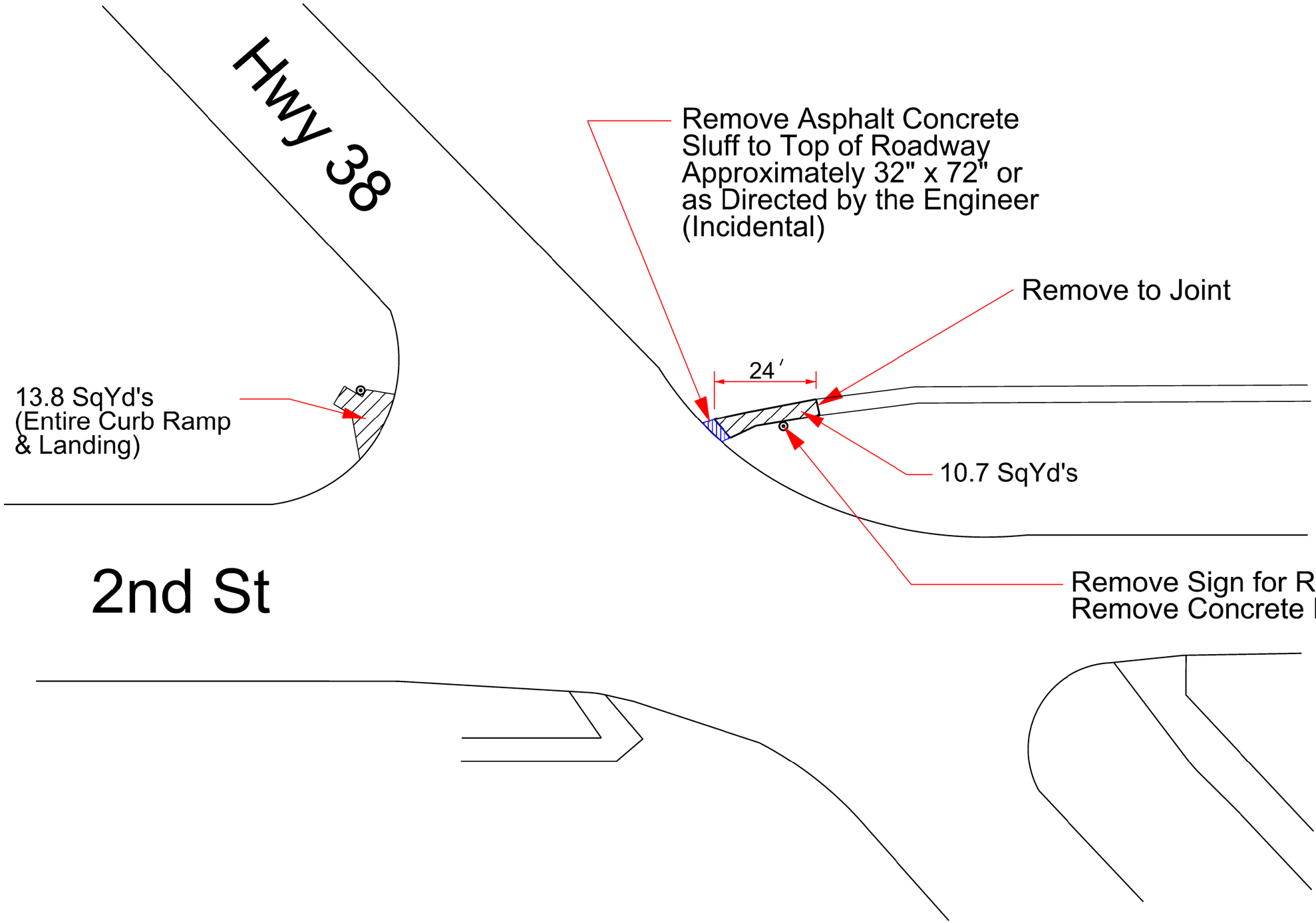


PLOT SCALE - 1:24.3164

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	038-271	6	12

Plotting Date: 03/29/2018

REMOVAL DETAIL



PLOTTED FROM - TRSF12114

PLOT NAME - 3

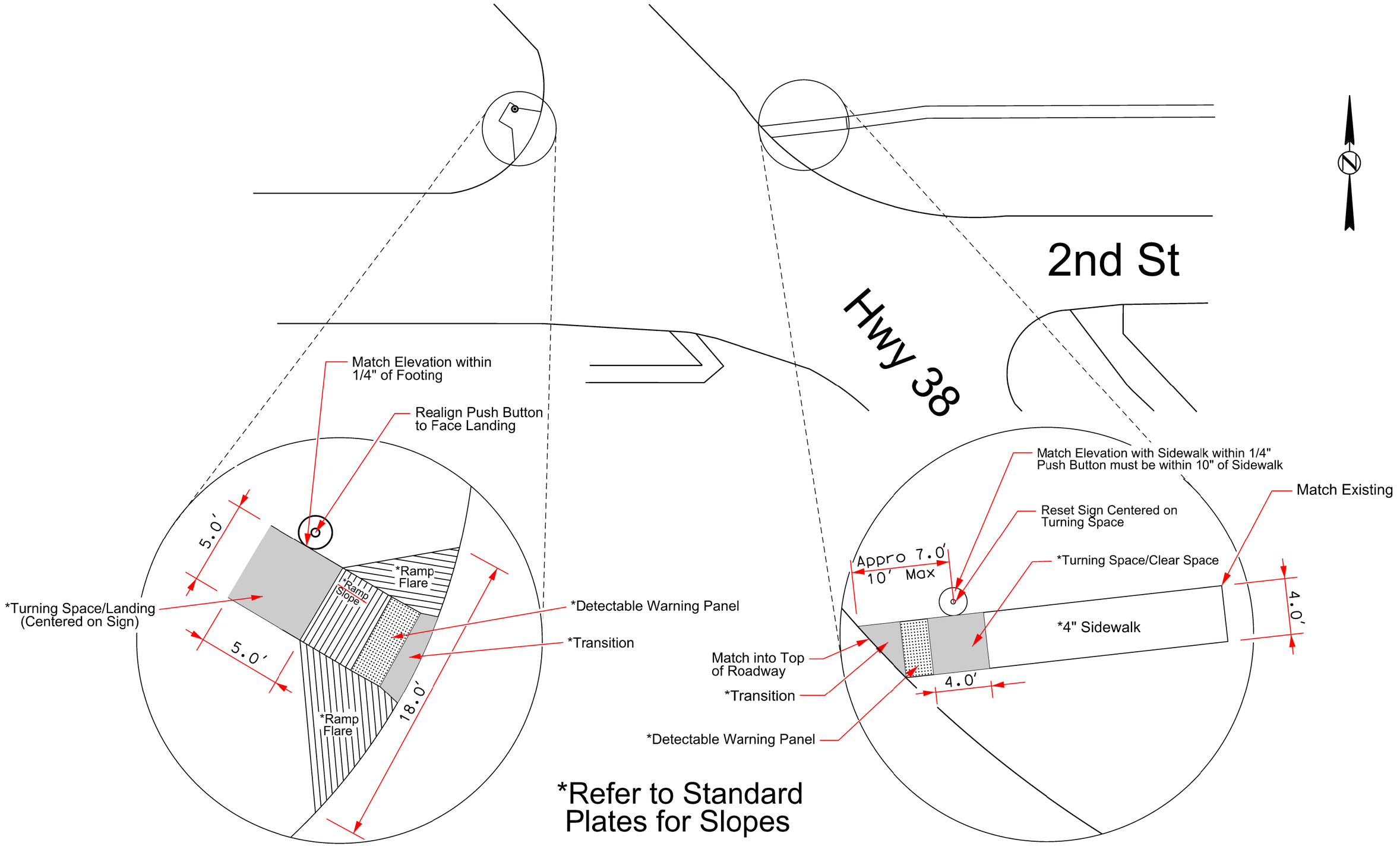
FILE - ...\MINN151T\DESIGN\TITLE_151T.DGN

PLOT SCALE - 1'=29.4902

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	038-271	7	12

Plotting Date: 03/29/2018

ADA IMPROVEMENT LAYOUTS



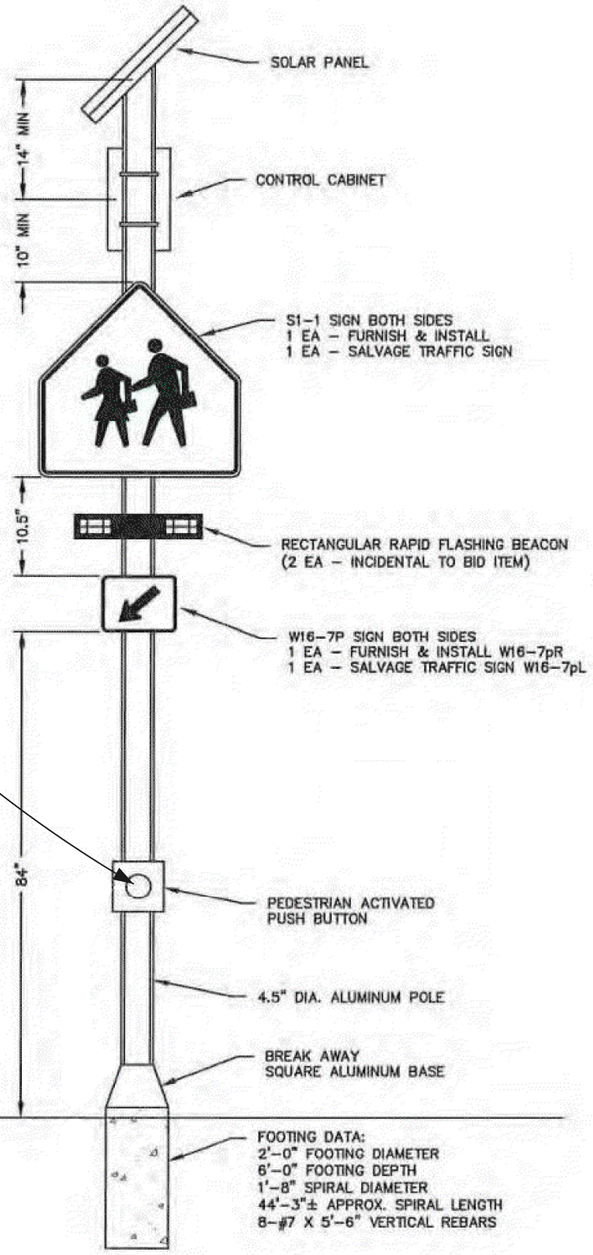
*Refer to Standard Plates for Slopes

PLOTTED FROM - TRSF12114

PLOT NAME - 4

FILE - ...\MINN151T\DESIGN\TITLE_151T.DGN

EXISTING SIGN DETAIL & NOTES



The maximum height of the push buttom above the surface of the concrete sidewalk is 42". The push button must also be within 10 inches of the edge of sidewalk.

SOLAR POWERED FLASHING BEACON

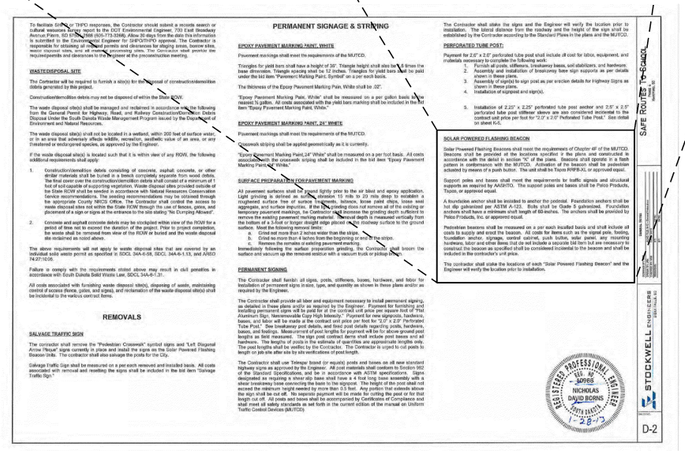
Solar Powered Flashing Beacons shall meet the requirements of Chapter 4F of the MUTCD. Beacons shall be provided at the locations specified in the plans and constructed in accordance with the detail in section "K" of the plans. Beacons shall operate in a flash pattern in conformance with the MUTCD. Activation of the beacon shall be pedestrian actuated by means of a push button. The unit shall be Tapco RRFB-XL or approved equal.

Support poles and bases shall meet the requirements for traffic signals and structural supports as required by AASHTO. The support poles and bases shall be Pelco Products, Tapco, or approved equal.

A foundation anchor shall be installed to anchor the pedestal. Foundation anchors shall be hot dip galvanized per ASTM A-123. Bolts shall be Grade 5 galvanized. Foundation anchors shall have a minimum shaft length of 60-inches. The anchors shall be provided by Pelco Products, Inc. or approved equal.

Pedestrian beacons shall be measured on a per each installed basis and shall include all costs to supply and erect the beacon. All costs for items such as the signal pole, footing, foundation anchor, signage, control cabinet, push button, solar panel, any mounting hardware, labor and other items that do not include a separate bid item but are necessary to construct the beacon as specified shall be considered incidental to the beacon and shall be included in the contractor's unit price.

The contractor shall stake the locations of each "Solar Powered Flashing Beacon" and the Engineer will verify the location prior to installation.



PERMANENT SIGNAGE & STRIPING

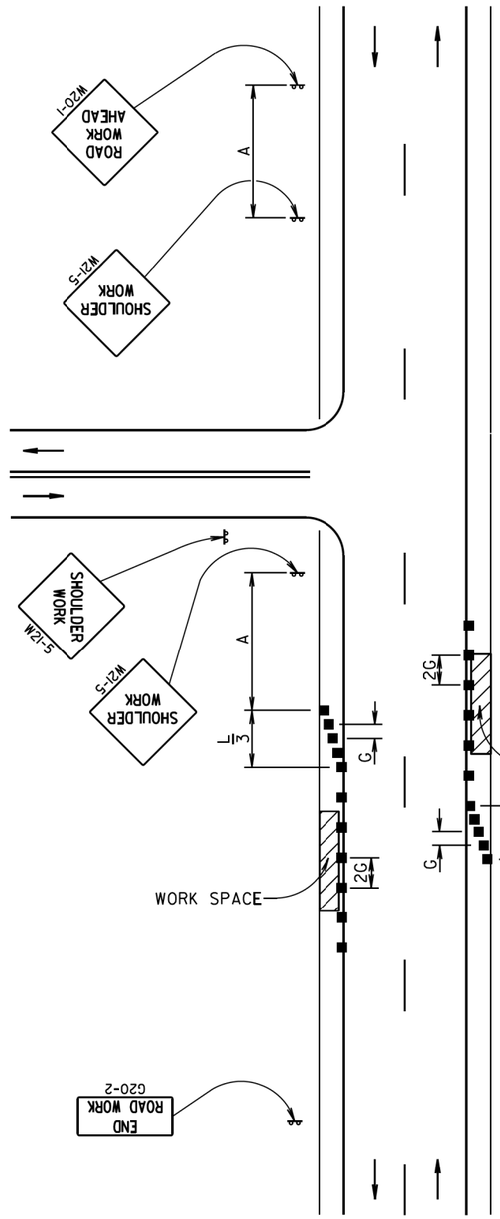
SAFE ROUTES TO SCHOOL

STOCKWELL ENGINEERS

D-2

For Information Only

Project P SRT(21)
PCN 03C5



Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)	Taper Length (Feet) (L)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	200	180	25
35 - 40	350	320	25
45	500	600	25
50	500	600	50
55	750	660	50
60 - 65	1000	780	50

■ Channelizing Device

END ROAD WORK G20-2

The channelizing devices shall be drums or 42" cones if traffic control must remain overnight.

For short duration operations (1 hour or less) all channelizing devices may be eliminated if a vehicle with an activated flashing or revolving yellow light is used.

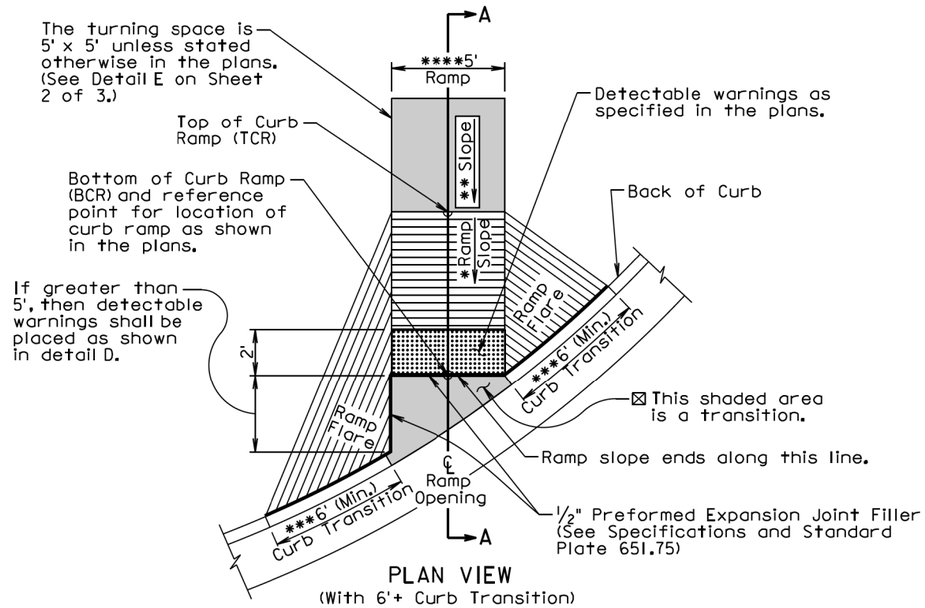
Worker signs (W21-1 or W21-1a) may be used instead of SHOULDER WORK signs.

A SHOULDER WORK sign should be placed on the left side of a divided or one-way roadway only if the left shoulder is affected.

The SHOULDER WORK sign on an intersecting roadway is not required if drivers emerging from that roadway will encounter another advance warning sign before they reach a work activity area.

June 3, 2016

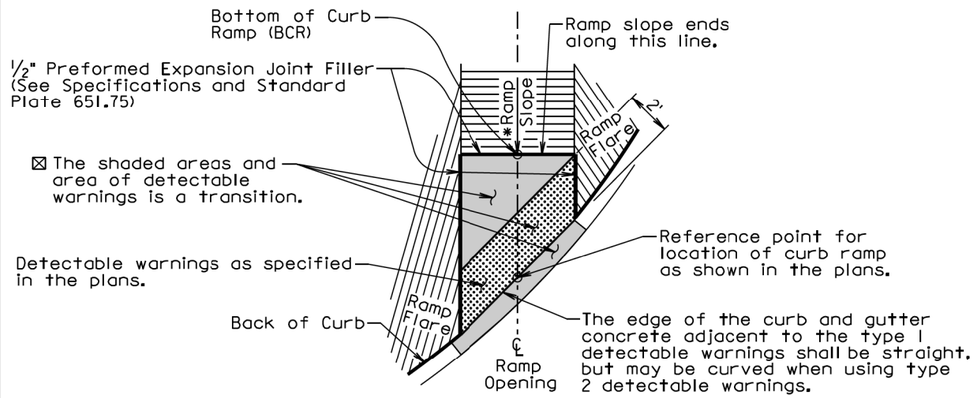
Published Date: 1st Qtr. 2018	SDDOT	GUIDES FOR TRAFFIC CONTROL DEVICES WORK ON SHOULDERS	PLATE NUMBER 634.03 Sheet 1 of 1



PLAN VIEW
(With 6'+ Curb Transition)

⊠ The slope within the transition area shall not be steeper than 5%. The concrete within the transition shall be placed monolithic with the curb and gutter or fillet section concrete. The concrete thickness within the transition shall be the same as the curb and gutter or fillet section concrete thickness.

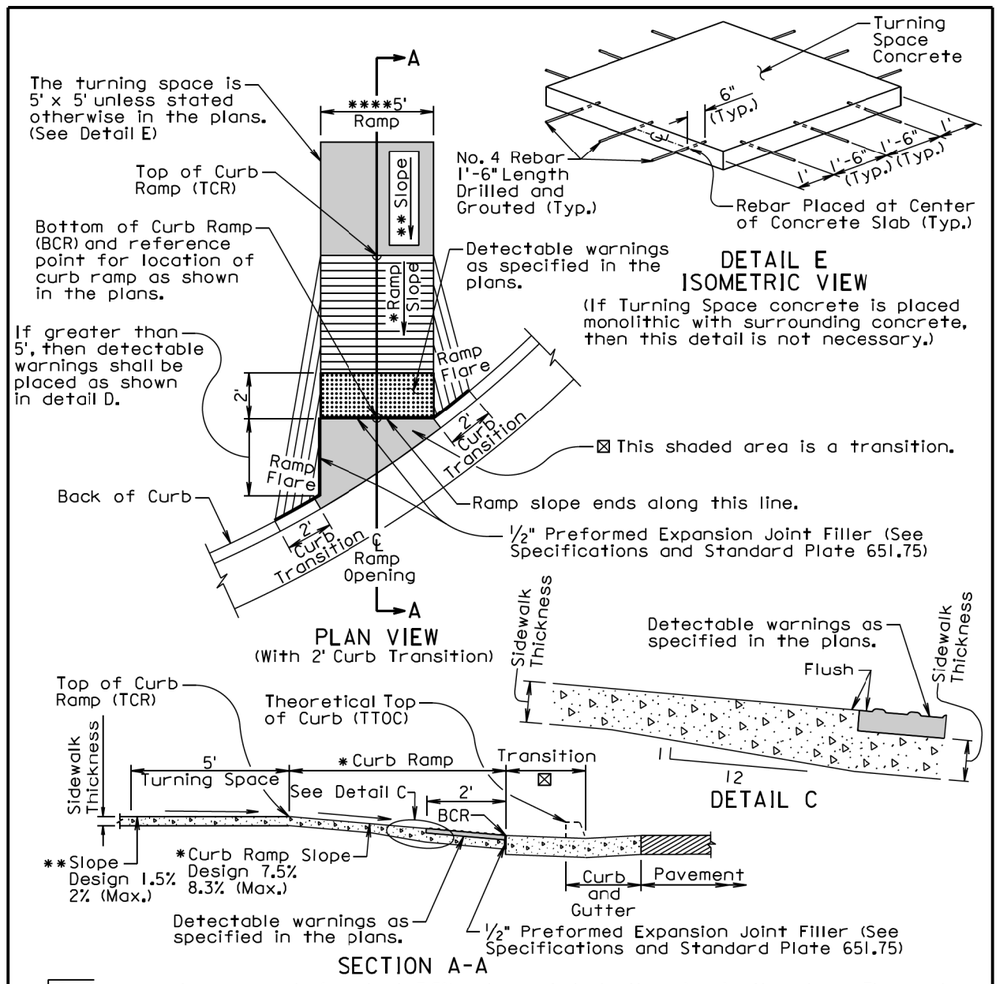
*** The curb transition shall be a minimum of 6' long, a maximum of 10' long, and the curb transition slope shall not be steeper than 10% unless stated otherwise in the plans. The curb transition length shall be adjusted as necessary to meet slope and length requirements based on field geometrics.



DETAIL D

September 6, 2015

Published Date: 1st Qtr. 2018	SDDOT	TYPE 2 CURB RAMP (DIRECTIONAL CURB RAMP)	PLATE NUMBER 651.02 Sheet 1 of 3



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% and shall not exceed 15' in length unless stated otherwise in the plans.

* The elevation of point TCR shall always be higher than the elevation of point TTOC unless specified otherwise in the plans. The curb ramp length dimension as shown in the plans 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%. Plans are designed using a 1.5% slope 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 ramp width is 5' unless stated otherwise in the plans.

September 6, 2015

Published Date: 1st Qtr. 2018	SDDOT	TYPE 2 CURB RAMP (DIRECTIONAL CURB RAMP)	PLATE NUMBER 651.02
			Sheet 2 of 3

GENERAL NOTES:

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

The curb ramp depicted on this standard plate may be used with a PCC fillet section or curb and gutter. The curb ramp shall be placed at the location stated in the plans.

Sidewalk shall not be placed adjacent to the curb ramp flares when a 2' curb transition is used unless shown otherwise 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.

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.

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 shall be included in the measured and paid for quantity of sidewalk.

If rebar is placed in the Turning Space as depicted in DETAIL E, the cost of the materials, labor, and equipment to furnish and install the rebar shall be incidental to the contract unit price per square foot for the corresponding concrete sidewalk bid item.

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.

All costs for furnishing and installing the transition area at the base of the curb ramp shall be incidental to the contract unit price per foot for the corresponding curb and gutter bid item when curb and gutter is used and shall be incidental to the contract unit price per square yard for the corresponding PCC fillet section bid item when a PCC fillet section is used.

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

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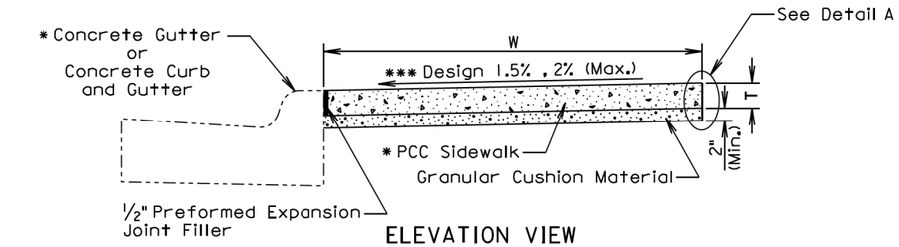
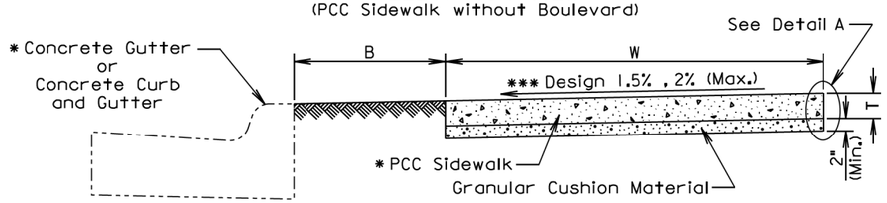
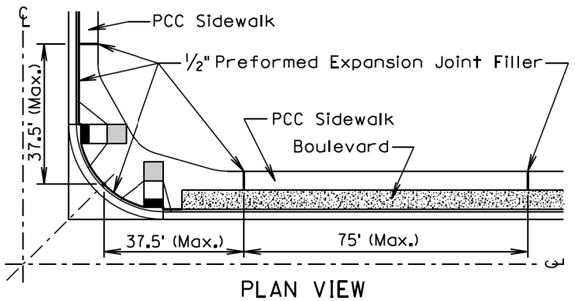


ELEVATION VIEW
(PCC Sidewalk without Boulevard)



ELEVATION VIEW
(PCC Sidewalk with Boulevard)

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.



PLAN VIEW

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 ½ 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.

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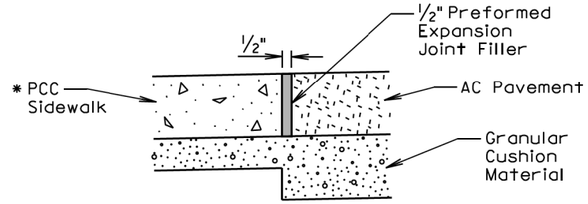
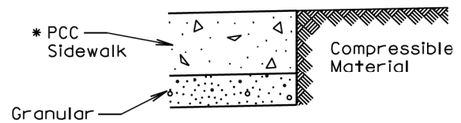
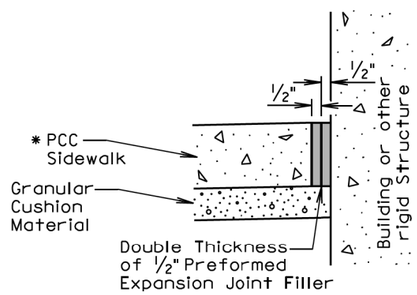


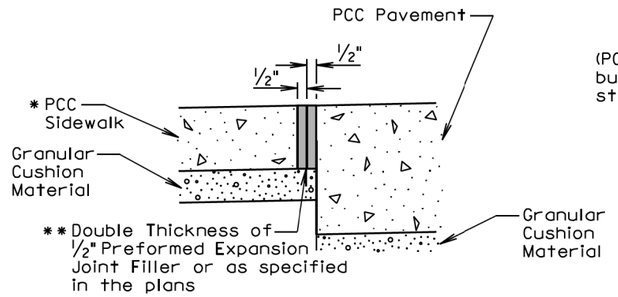
ELEVATION VIEW
(PCC sidewalk adjacent to asphalt concrete pavement)



ELEVATION VIEW
(PCC sidewalk adjacent to earthen material, landscape rock, or other compressible materials)



ELEVATION VIEW
(PCC sidewalk adjacent to building or other rigid structure)



ELEVATION VIEW
(PCC sidewalk adjacent to PCC pavement)

Detail A
(Use Appropriate Detail(s))

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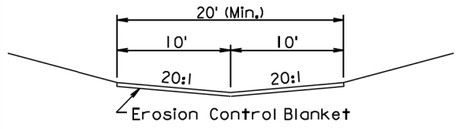
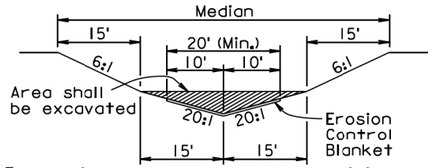
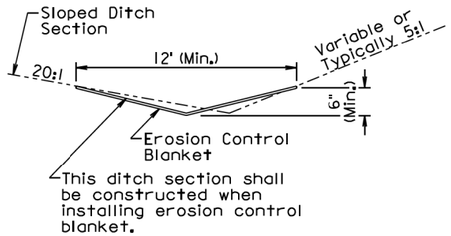


STANDARD DITCH SECTION

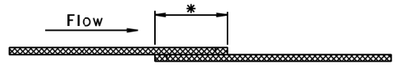


The median shall be shaped to the limits shown in this detail where the erosion control blanket will be placed.

MEDIAN SECTION



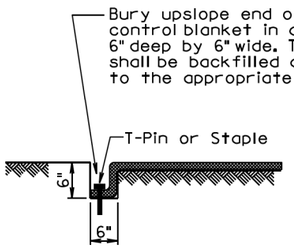
SLOPED DITCH SECTION



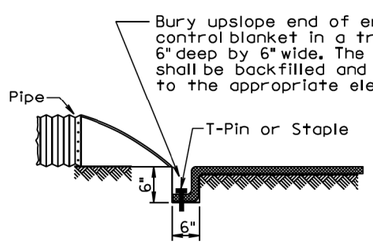
* Use a 4" (Min.) overlap wherever two widths of erosion control blanket are applied side by side.

* Use a 6" (Min.) overlap wherever one roll of erosion control blanket ends and another begins.

OVERLAP DETAIL



TRENCH DETAIL



PIPE END DETAIL

GENERAL NOTES:

Prior to placement of the erosion control blanket, the areas shall be properly prepared, shaped, seeded, and fertilized.

Erosion control blanket shall be unrolled in the direction of the flow of water when placed in ditches and on slopes. The upslope end of the erosion control blanket shall be buried in a trench 6" wide by 6" deep. There shall be at least a 6" overlap wherever one roll of erosion control blanket ends and another begins, with the upslope erosion control blanket placed on top of the downslope erosion control blanket.

The erosion control blanket shall be pinned to the ground according to the manufacturer's installation recommendations.

After the placement of the erosion control blanket, the Contractor shall fine grade along all edges of the blanket to maintain a uniform slope adjacent to the blanket and level any low spots which might prevent uniform and unrestricted flow of side drainage directly onto the erosion control blanket.

All ditch sections shall be shaped when installing the erosion control blanket. All costs for shaping the ditches shall be incidental to the contract unit price per foot for "Shaping for Erosion Control Blanket".

December 23, 2004

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			Sheet 1 of 1