FOR BIDDING PURPOSES ONLY

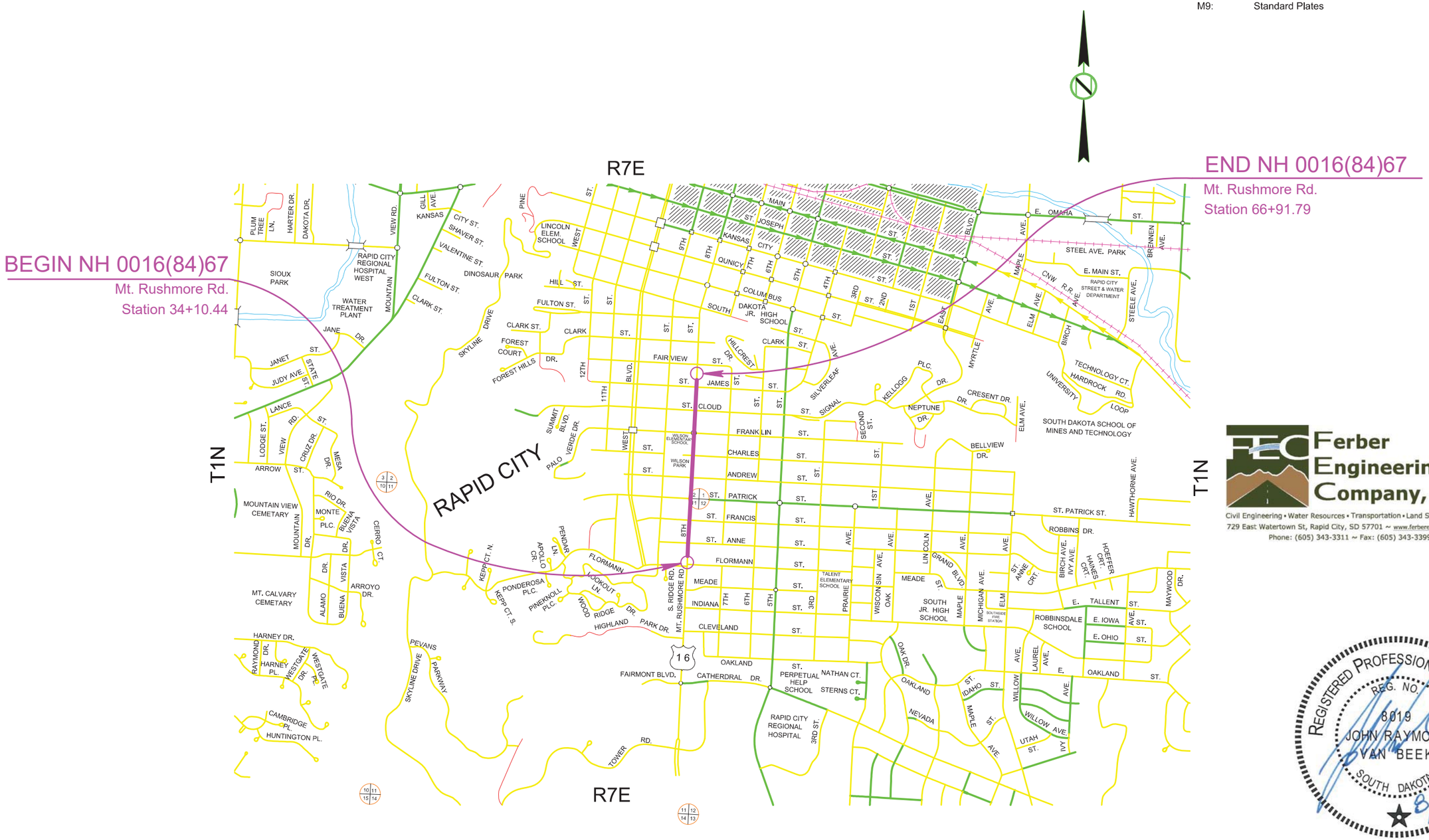
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH0016(84)67	M1	M9

PLOTTING DATE: 07-29-16

SECTION M - PAVEMENT MARKING PLANS

INDEX OF SHEETS

M1: General Layout with Index
M2: Estimate with General Notes and Tables
M3-M8: Pavement Marking Layouts
M9: Standard Plates



Ferber Engineering Company, Inc.
Civil Engineering • Water Resources • Transportation • Land Surveying • GIS
729 East Watertown St, Rapid City, SD 57701 ~ www.ferberengineering.com
Phone: (605) 343-3311 ~ Fax: (605) 343-3399

REGISTERED PROFESSIONAL ENGINEER
REG. NO. 8019
JOHN RAYMOND VAN BEEK
SOUTH DAKOTA
8/17/16

07-29-16 P:\12-117\AutoCAD\PlanSheets\049F\Section M\049F-PVMNT MARKING TITLE.dwg

SECTION M ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E0010	Cold Applied Plastic Pavement Marking, 4"	6,572	Ft
633E0030	Cold Applied Plastic Pavement Marking, 24"	1,789	Ft
633E0040	Cold Applied Plastic Pavement Marking, Arrow	42	Each
633E1400	Pavement Marking Paint, 4" White	374	Ft
633E1460	Pavement Marking Paint, Symbol	1	Each
633E5000	Grooving for Cold Applied Plastic Pavement Marking, 4"	6,572	Ft
633E5015	Grooving for Cold Applied Plastic Pavement Marking, 24"	1,789	Ft
633E5025	Grooving for Cold Applied Plastic Pavement Marking, Arrow	42	Each

PAVEMENT MARKING PAINT

All materials shall be applied as per manufacturer's recommendations.

COLD APPLIED PLASTIC PAVEMENT MARKING

All materials shall be applied as per the manufacturer's recommendations.

Cold Applied Plastic Pavement Markings shall be 3M Stamark All Weather Tape or an approved equal.

GROOVING FOR COLD APPLIED PLASTIC PAVEMENT MARKING

The Contractor shall establish a positive means for the removal of the grinding and/or grooving residue. Residue from dry grooving shall be vacuumed. Solid residue shall be removed from the pavement surfaces before being blown by traffic action or wind. Residue from wet grooving shall not be permitted to flow across lanes being used by public traffic or into gutter or drainage facilities. Residue, whether in solid or slurry form, shall be disposed of in a manner that will prevent it from reaching any waterway in a concentrated state. All costs for removal of grinding and/or grooving residue shall be included in the contract unit price per foot for "Grooving for Cold Applied Plastic Pavement Marking".

If damage occurs, including, but not limited to, joints, joint sealant material, and backer rod, the grooving operation shall be stopped and modifications shall be made to the grooving operation to prevent further damage. The Contractor may be required to use specially prepared circular diamond blade cutting heads to prevent damage at the joints. Damage caused shall be repaired or replaced by the Contractor, as directed by the Engineer. No additional payment will be made for the repair work or any reapplication of the pavement marking in the area of the repair.

REMOVE PAVEMENT MARKING, 4" OR EQUIVALENT

Markings that fall outside of the new groove shall be obliterated using additional methods approved by the Engineer. Removal of the existing markings shall be accomplished without causing damage to the pavement, pavement joints, or joint sealant. The Contractor shall repair any damage to the pavement, pavement joints, or joint sealant for no additional payment and at no cost to the State. All costs for materials, labor, and equipment necessary to remove the existing markings shall be incidental to the contract unit price per foot for "Remove Pavement Marking, 4" or Equivalent".

CROSSWALK MARKING

The Contractor shall place a crosswalk bar centered on each lane line and a crosswalk bar in the middle of each lane. The crosswalk bar is 2 ft wide. The spacing between crosswalk bars shall not exceed 5 ft and spacing shall be consistent across the approach. The Contractor shall direct any questions regarding the placement of the crosswalk bars to the Region Traffic Engineer.

REGISTERED PROFESSIONAL ENGINEER
REG. NO. 8019
JOHN RAYMOND VAN BEEK
SOUTH DAKOTA
8/17/16

PAVEMENT MARKING LAYOUT

PRESENT US HWY 16/MT. RUSHMORE ROAD

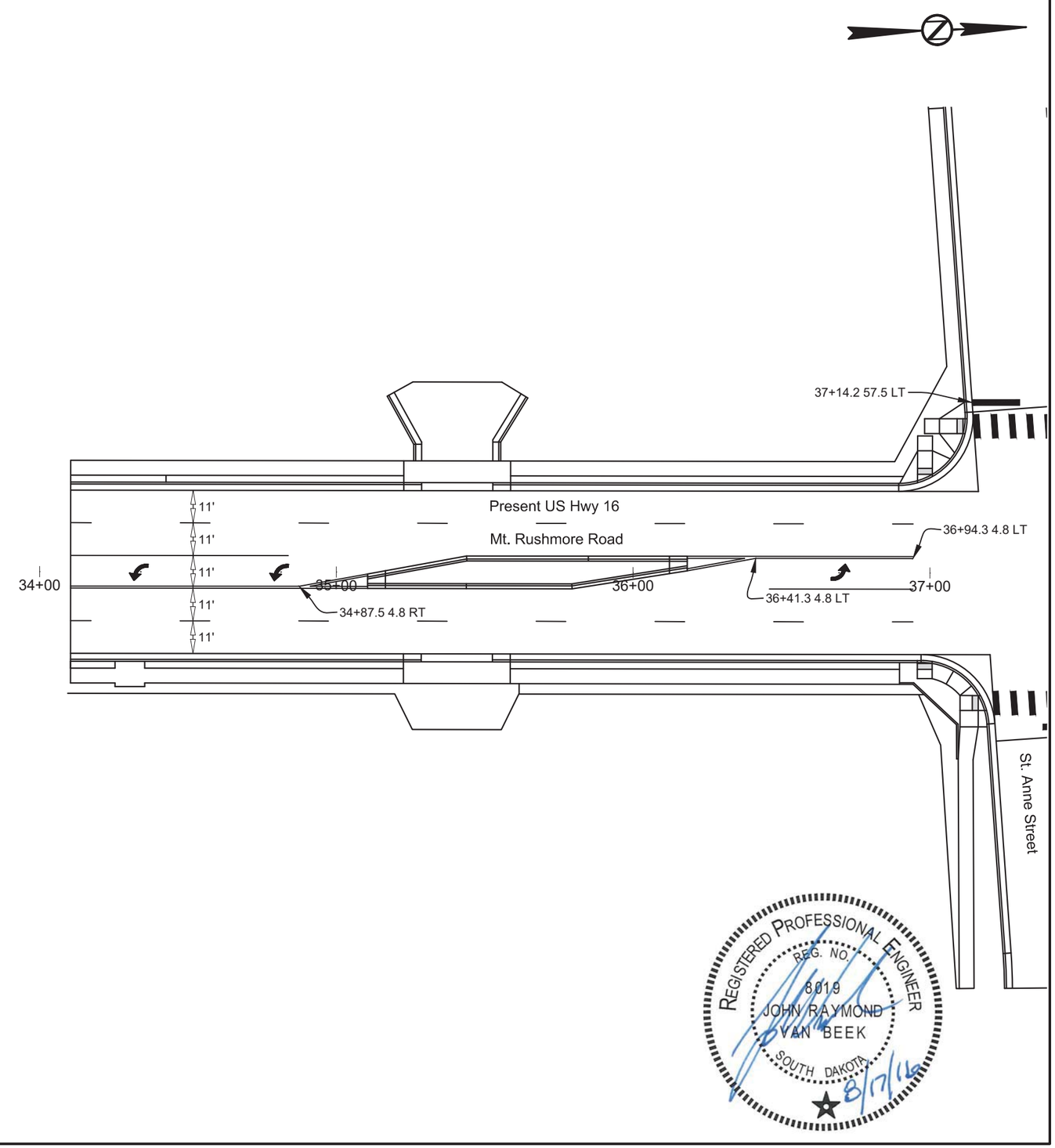
FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH0016(84)67	M3	M9

PLOTTING DATE: 07-29-16

ESTIMATE OF QUANTITIES

KEY	ITEM	EST QUANT	UNIT
4 / W	COLD APPLIED PLASTIC PAVEMENT MARKING, 4" WHITE	3299	FT
4 / Y	COLD APPLIED PLASTIC PAVEMENT MARKING, 4" YELLOW	3273	FT
24 / W	COLD APPLIED PLASTIC PAVEMENT MARKING, 24" WHITE	1704	FT
24 / Y	COLD APPLIED PLASTIC PAVEMENT MARKING, 24" YELLOW	85	FT
	COLD APPLIED PLASTIC PAVEMENT MARKING, ARROW	42	EACH
	GROOVING FOR COLD APPLIED PLASTIC PAVEMENT MARKING, 4"	6572	FT
	GROOVING FOR COLD APPLIED PLASTIC PAVEMENT MARKING, 24"	1789	FT
	GROOVING FOR COLD APPLIED PLASTIC PAVEMENT MARKING, ARROW	42	EACH
4 / WP	PAVEMENT MARKING PAINT, 4" WHITE	374	FT
	PAVEMENT MARKING PAINT, SYMBOL	1	EACH



REGISTERED PROFESSIONAL ENGINEER
REG. NO. 8019
JOHN RAYMOND VAN BEEK
SOUTH DAKOTA
8/17/16

07-29-16 P:\12-117\AutoCAD\PlanSheets\049F1\Section_M\049F-PVMNT_MARKING-PP.dwg

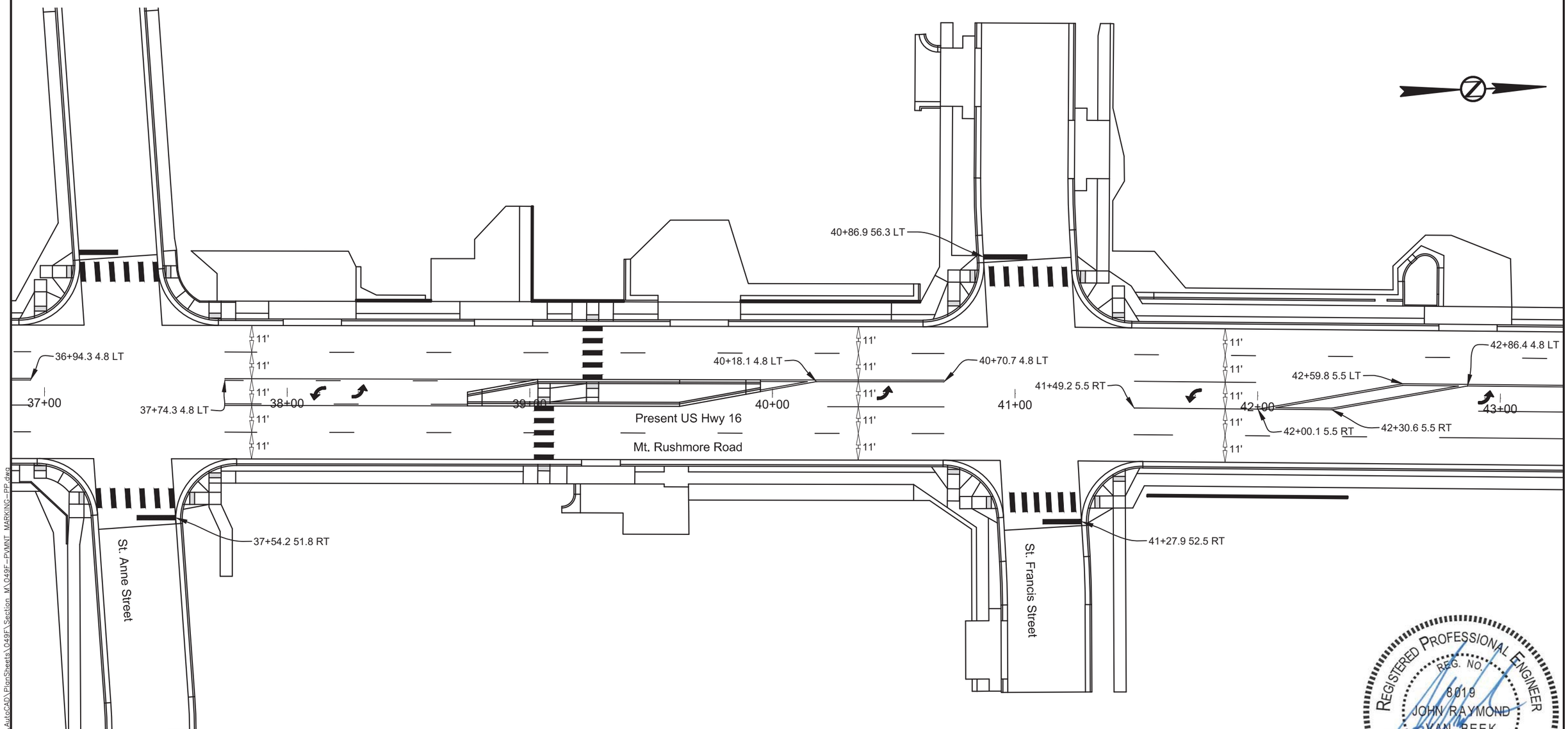
PAVEMENT MARKING LAYOUT

PRESENT US HWY 16/MT. RUSHMORE ROAD

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH0016(84)67	M4	M9

PLOTTING DATE: 07-29-16



REGISTERED PROFESSIONAL ENGINEER
REG. NO. 8019
JOHN RAYMOND VAN BEEK
SOUTH DAKOTA
8/17/16

07-29-16 P:\12-117\AutoCAD\PlanSheets\049F\Section M\049F-PVMNT MARKING-PP.dwg

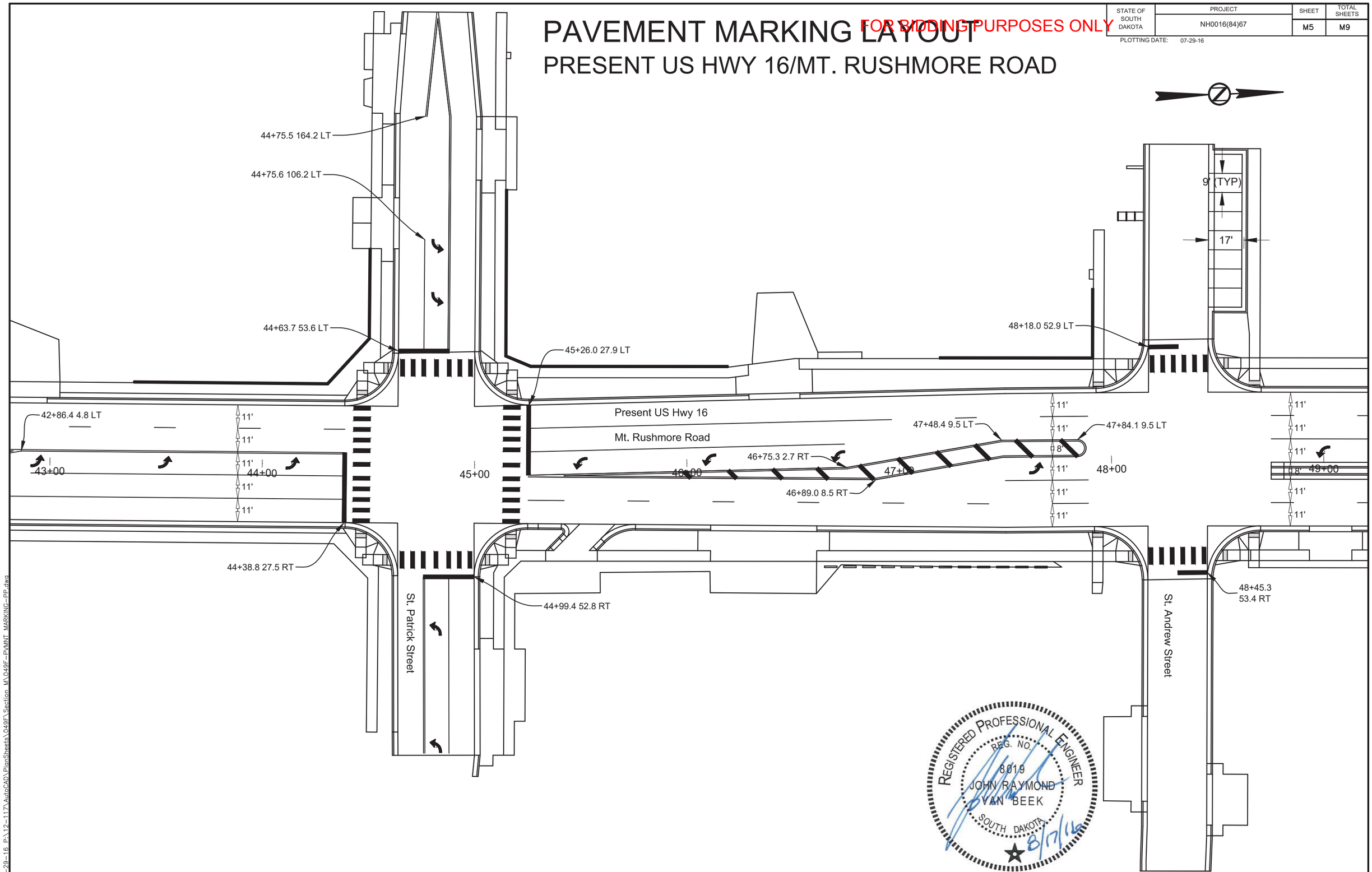
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH0016(84)67	M5	M9

PLOTTING DATE: 07-29-16

PAVEMENT MARKING LAYOUT

FOR BIDDING PURPOSES ONLY

PRESENT US HWY 16/MT. RUSHMORE ROAD



07-29-16 P:\12-117\AutoCAD\PlanSheets\049F\Section M\049F-PVMNT MARKING-PP.dwg

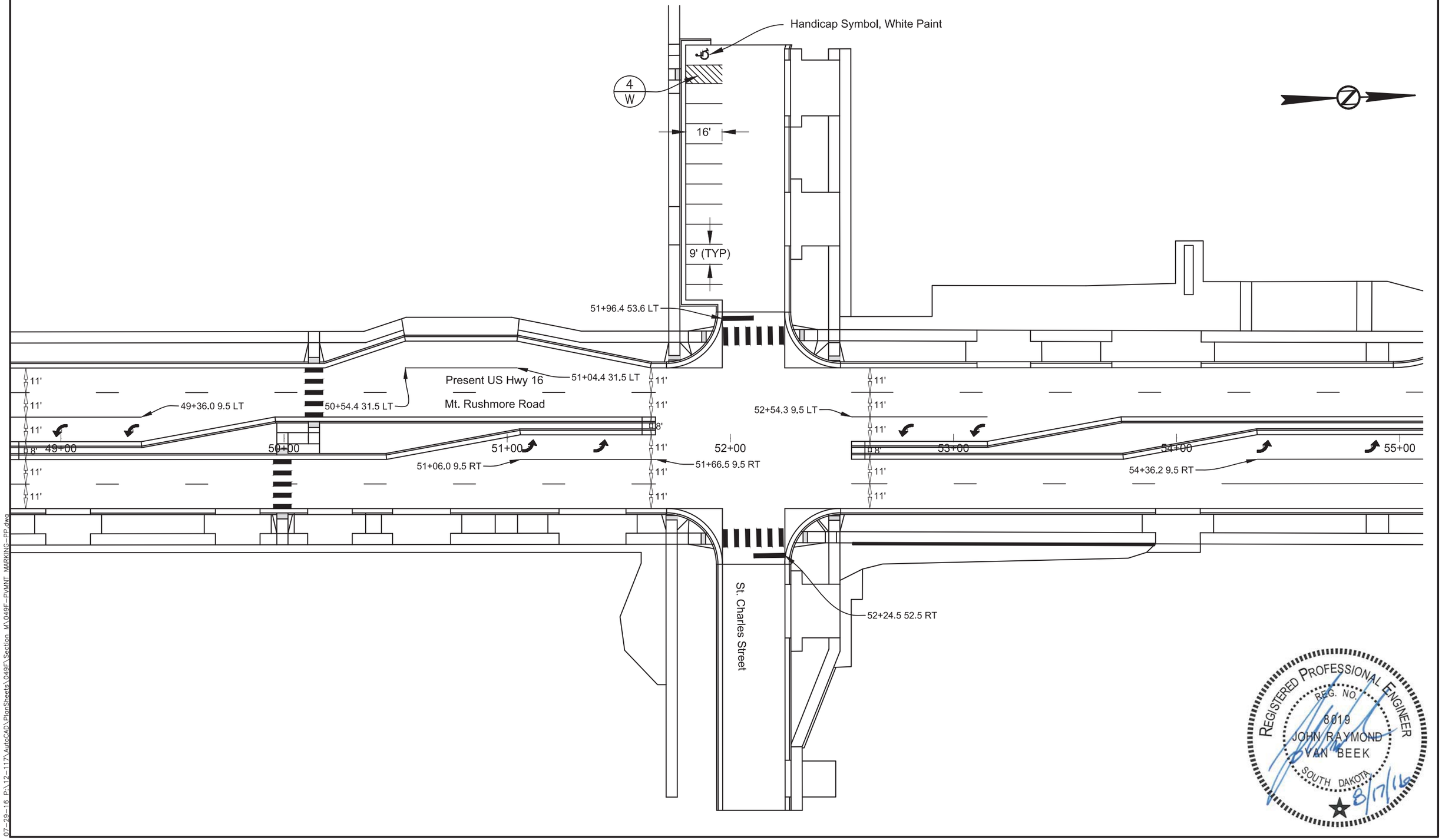
PAVEMENT MARKING LAYOUT

PRESENT US HWY 16/MT. RUSHMORE ROAD

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH0016(84)67	M6	M9

PLOTTING DATE: 07-29-16



07-29-16 P:\12-117\AutoCAD\PlanSheets\049F\Section MA049F-PVMNT MARKING-PP.dwg

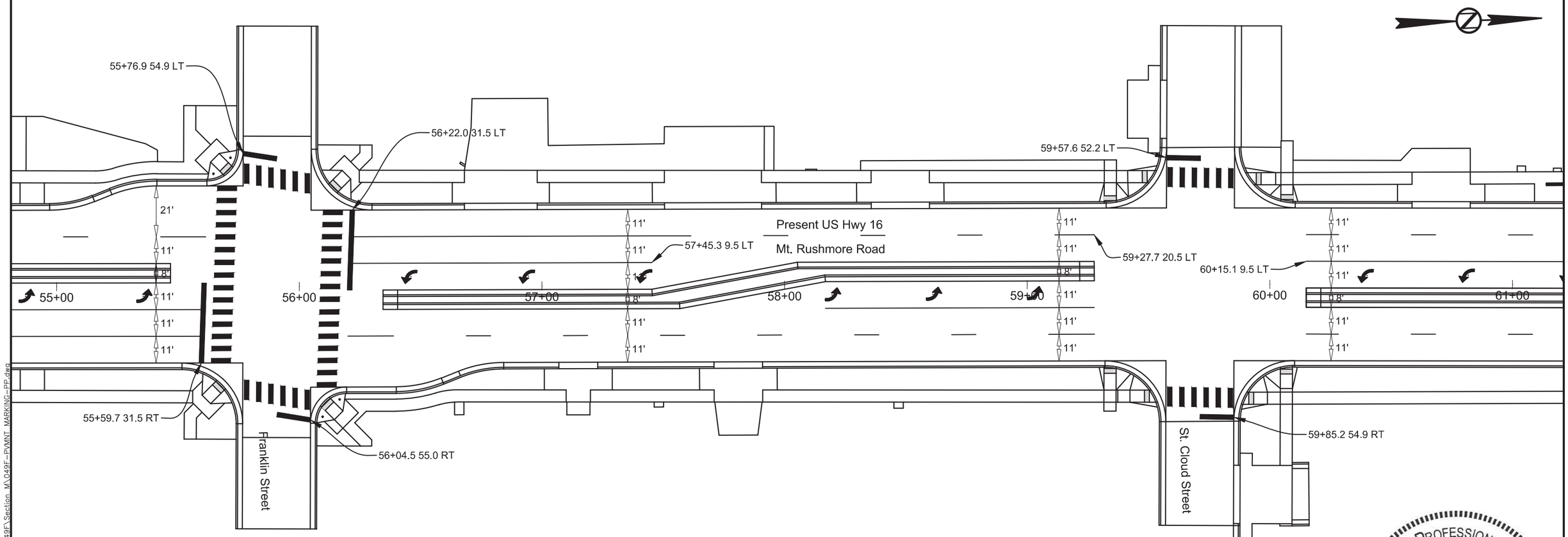
PAVEMENT MARKING LAYOUT

PRESENT US HWY 16/MT. RUSHMORE ROAD

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH0016(84)67	M7	M9

PLOTTING DATE: 07-29-16



REGISTERED PROFESSIONAL ENGINEER
REG. NO. 8819
JOHN RAYMOND VAN BEEK
SOUTH DAKOTA
8/17/16

07-29-16 P:\12-117\AutoCAD\PlanSheets\049F\Section M\049F-PVMNT MARKING-PP.dwg

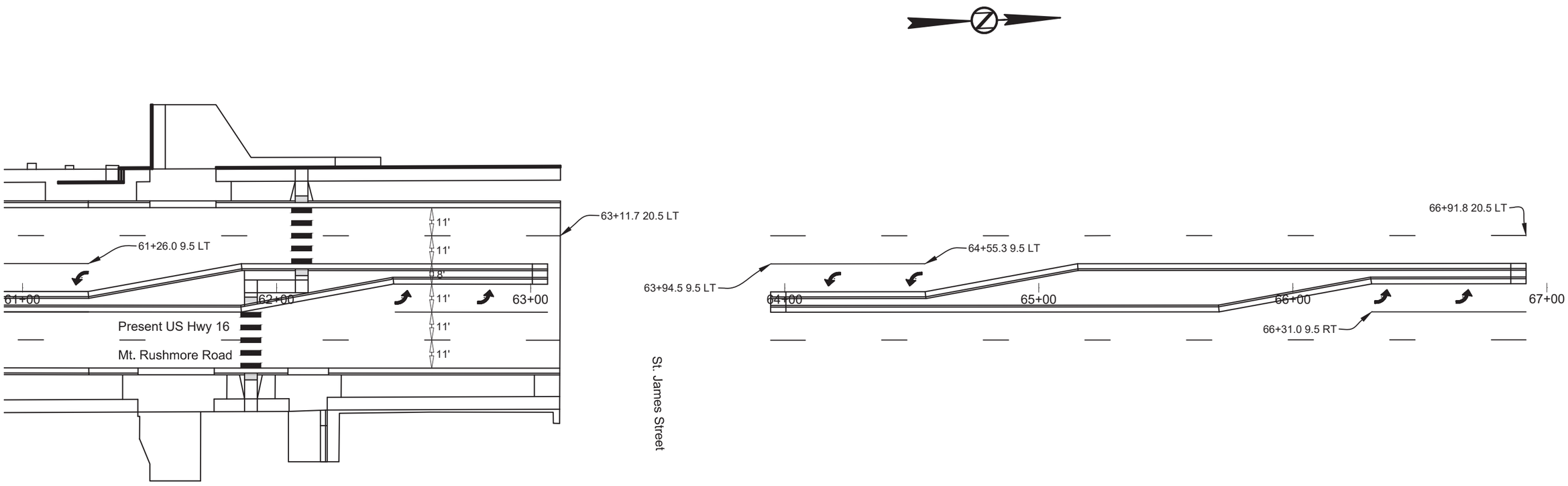
PAVEMENT MARKING LAYOUT

PRESENT US HWY 16/MT. RUSHMORE ROAD

FOR BIDDING PURPOSES ONLY

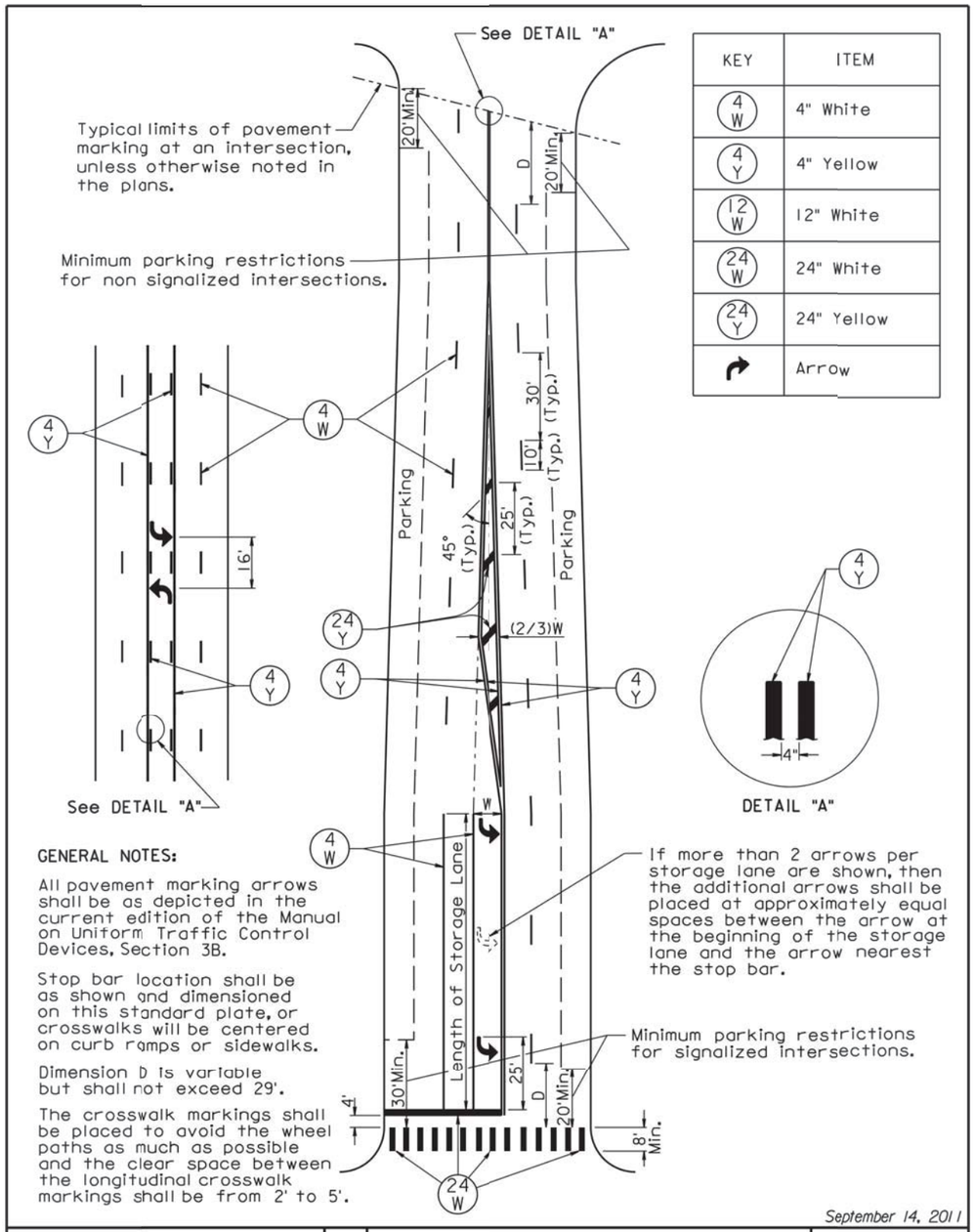
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH0016(84)67	M8	M9

PLOTTING DATE: 07-29-16



REGISTERED PROFESSIONAL ENGINEER
REG. NO. 8019
JOHN RAYMOND VAN BEEK
SOUTH DAKOTA
8/17/16

07-29-16 P:\12-117\AutoCAD\PlanSheets\049F\Section M\049F-PVMNT MARKING-PP.dwg



KEY	ITEM
4 W	4" White
4 Y	4" Yellow
12 W	12" White
24 W	24" White
24 Y	24" Yellow
↱	Arrow

GENERAL NOTES:

All pavement marking arrows shall be as depicted in the current edition of the Manual on Uniform Traffic Control Devices, Section 3B.

Stop bar location shall be as shown and dimensioned on this standard plate, or crosswalks will be centered on curb ramps or sidewalks.

Dimension D is variable but shall not exceed 29'.

The crosswalk markings shall be placed to avoid the wheel paths as much as possible and the clear space between the longitudinal crosswalk markings shall be from 2' to 5'.

September 14, 2011

Published Date: 2nd Qtr. 2016

SDDOT

PAVEMENT MARKINGS FOR ADJACENT INTERSECTIONS AND CENTER TURN LANE

PLATE NUMBER 633.01

Sheet 1 of 1

07-29-16 P:\12-117\AutoCAD\PlanSheets\049F\Section MA049F-PVMNT MARKING-DTL-STANDARD.dwg