

# North Dakota Department of Transportation

Thomas K. Sorel  
*Director*

Doug Burgum  
*Governor*

November 1, 2017

## ADDENDUM 1 – JOB 37

TO: All prospective bidders on projects NH-3-001(027)161 (PCN 21667), NH-6-002(122)295 (PCN 21341) and NH-6-002(123)295 (PCN 21346), Job No. 37 scheduled for the November 17, 2017 bid opening.

The following plan and request for proposal revisions shall be made:

### Plan Revisions for SNH-002(122)295

**Remove and replace sheets 6-2, 8-2, 10-1 and 100-1 with revised sheets dated 10/30/2017 and 10/31/2017.**

#### Section 6 Sheet 2:

Added Note 704-511.

#### Section 8 Sheet 2:

Decrease bid item 704 1500 Obliteration of Pavement Marking from 21,759 SF to 4,963 SF.

Increase bid item 762 0430 Short Term 4 IN Line – Type NR from 280 to 25,468 LF.

Removed bid item 762 1104 Pavement Marking Painted 4 IN Line 25,188 LF.

#### Section 10 Sheet 1:

Changed the pavement marking tables.

#### Section 100 Sheet 1:

Change the quantity of obliteration of pavement marking.

### Plan Revisions for NH-6-002(123)295:

**Remove and replace sheets 2-1, 6-1 and 8-1 with revised sheets dated 10/10/2017. Add Standard Drawing D-760-2 Rumble Strips Divided Highways.**

#### Section 2 Sheet 1:

Added Standard Drawing D-760-2.

#### Section 6 Sheet 1:

Change note 570-P02.

#### Section 8 Sheet 1:

Increased bid item 760 0001 Rumble Strips – Concrete Shoulder from 9.500 to 9.638 Mile.

Request for Proposal Revisions:

**Remove and replace pages 8 and 9 of 11 with the enclosed pages revised 10/31/2017.**

The following changes were made to the Bid Items:

Spec No.	Code No.	Description	Description of Change
704	1500	OBLITERATION OF PAVEMENT MARKING	Decreased from 21,759 to 4,963 SF
760	0001	RUMBLE STRIPS – CONCRETE SHOULDER	Increased from 9.500 to 9.638 MILE
762	0430	SHORT TERM 4IN LINE-TYPE NR	Increased from 7,399 to 32,587 LF
762	1104	PVMT MK PAINTED 4IN LINE	Decreased from 37,509 to 12,321 LF

This addendum is to be incorporated into the bidder's proposal for this project. Project Bids files should be updated by downloading the addendum file from the Bid Express on-line bidding exchange at <http://www.bidx.com/> and load it into the AASHTOWare Project Bids program.



PHILLIP MURDOFF – CONSTRUCTION SERVICES ENGINEER

80:jjw

Enclosure

**BID ITEMS**

Projects: NH-3-001(027)161 (PCN-21667), NH-6-002(122)295 (PCN-21341), and NH-6-002(123)295 (PCN-21346)

**Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.**

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
049	704	1500	OBLITERATION OF PAVEMENT MARKING	SF	4,963.				
050	704	3510	PRECAST CONCRETE MED BARRIER-STATE FURNISHED	EA	80.				
051	706	0400	FIELD OFFICE	EA	1.				
052	706	0500	AGGREGATE LABORATORY	EA	1.				
053	706	0550	BITUMINOUS LABORATORY	EA	1.				
054	706	0600	CONTRACTOR'S LABORATORY	EA	1.				
055	709	0151	GEOSYNTHETIC MATERIAL TYPE R1	SY	3,278.				
056	714	7036	PIPE PVC 18IN	LF	704.				
057	754	0112	FLAT SHEET FOR SIGNS-TYPE IV REFL SHEETING	SF	14.				
058	754	0206	STEEL GALV POSTS-TELESCOPING PERFORATED TUBE	LF	215.				
059	754	0592	RESET SIGN PANEL	EA	4.				
060	760	0001	RUMBLE STRIPS - CONCRETE SHOULDER	MILE	9.638				
061	760	0005	RUMBLE STRIPS - ASPHALT SHOULDER	MILE	1.880				
062	760	0007	RUMBLE STRIPS - ASPHALT CENTERLINE	MILE	.940				
063	760	0010	RUMBLE STRIPS - INTERSECTION	SET	1.				
064	762	0103	PVMT MK PAINTED-MESSAGE	SF	52.				

**BID ITEMS**

Projects: NH-3-001(027)161 (PCN-21667), NH-6-002(122)295 (PCN-21341), and NH-6-002(123)295 (PCN-21346)

**Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.**

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
065	762	0110	EPOXY PVTM MK 4IN LINE-GROOVED	LF	13,213.				
066	762	0112	EPOXY PVTM MK MESSAGE	SF	96.				
067	762	0113	EPOXY PVTM MK 4IN LINE	LF	154,069.				
068	762	0115	EPOXY PVTM MK 8IN LINE	LF	2,270.				
069	762	0117	EPOXY PVTM MK 24IN LINE	LF	65.				
070	762	0200	RAISED PAVEMENT MARKERS	EA	21,309.				
071	762	0430	SHORT TERM 4IN LINE-TYPE NR	LF	32,587.				
072	762	1104	PVTM MK PAINTED 4IN LINE	LF	12,321.				
073	766	0100	MAILBOX-ALL TYPES	EA	3.				
074	772	2110	FLASHING BEACON-POST MOUNTED	EA	2.				
075	772	2935	REVISE FLASHING BEACON SYSTEM	EA	1.				
			<b>TOTAL SUM BID</b>						

<div>NOTES</div>		Revised 10/30/2017	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
			ND	NH-6-002(122)295	6	2
550-P01	DOWEL BARS: Include the cost of cleaning, drilling, epoxy, and dowel bars where the new concrete pavement abuts the existing concrete in the price bid for “Concrete Placement - Doweled”.	<p>Some 4 inch x 4 inch boards are available at the return location. Provide any additional 4 inch x 4 inch boards necessary to stack barriers. The boards will become property of the Department. Include the cost for boards in the contract unit price for "Precast Concrete Median Barrier - State Furnished".</p>				
550-P02	CONCRETE PAVEMENT: Place the concrete on a clean surface, free of loose or adhering foreign material. Air blast the milled surface no more than 30 minutes before placing concrete. Loaded trucks are allowed to run on the milled surface and back up to the concrete paving operation as long as loaded trucks aren't tracking foreign material onto the milled surface.					
550-P03	CONCRETE PAVEMENT: The Department will waive the requirement to place the reinforcing steel, tie bars and dowel bar assemblies a minimum of 2,000 feet ahead of the paving operation as stated in Sections 550.04 E.1 and 550.04 G.2 and allow the use of the roadway as a haul road at the Contractors request, provided the following conditions are met: <ul style="list-style-type: none"><li>Repair all damaged areas</li><li>Construct the finished surface to the specific surface tolerance prior to the placement of reinforcing steel, tie bars and dowel bar assemblies.</li><li>Place the reinforcing steel and tie bars on approved supports securely, properly and accurately in advance of the paving operation.</li></ul>	704-301	SEQUENCING ARROW PANEL – TYPE C – CROSSOVER: Provide solar powered arrow panels that meet the requirements of the MUTCD and ITE and that are capable of operating for 20 days without a solar charge.			
			Include all costs for materials, equipment, labor, and incidentals in the contract unit price for "Sequencing Arrow Panel – Type C – Crossover".			
		704-511	OBLITERATION OF PAVEMENT MARKINGS: Mask pavement markings designated for obliteration as specified in Section 704.04 N.1, "Masking".			
550-P04	LEAVE OUT: Leave out consists of paving half an intersection at a side street and allowing traffic to cross US 2 on the unpaved portion. The portion left out will not be paved until the concrete overlay has attained a flexural strength of 450 psi or a compressive strength of 3,000 psi. Leave out location are: <ul style="list-style-type: none"><li>Sta. 15611+75 – Airport Entrance</li><li>Sta. 15892+18 – 42<sup>nd</sup> St NE</li><li>Sta. 15981+30 – Private Drive Access</li><li>Sta. 16041+52 – 113<sup>th</sup> Ave NE</li><li>Sta. 16081+90 – Private Drive Access</li></ul> Leave outs may be added or eliminated at the request of the contractor and at the discretion of the engineer. Include the cost for this work in the price bid for “Concrete Placement – Doweled”.	704-P01	TRAFFIC CONTROL FOR BITUMINOUS PAVEMENT: Provide traffic control consisting of median crossings and road closure.			
			Maintain a minimum 12 feet wide lane for traffic at all times.			
			Complete necessary pavement marking and rumble strip installation operations prior to removing traffic control crossovers.			
			Phase 1: Construct median cross overs. A total of 4 lane closures have been provided to allow work at two separate locations. Remove existing median approach.			
			Phase 2: Perform work on mainline concrete overlay and cross road overlay.			
			Phase 3: Removal of median cross overs. A total of 4 lane closures have been provided to allow work at two separate locations.			
			Traffic control device quantities are based on the phasing described above and the following list. Provide additional devices at no cost to the Department.			
550-P05	CONCRETE PAVEMENT: Included in the quantity for “CONCRETE OVERLAY” is an additional 5% for irregularities.		Standard D-704-15 layout A – For ND 1 intersection paving Standard D-704-22 layouts K and L – For trucks hauling Standard D-704-26 layouts CC, EE, and GG – For paving Standard D-704-34 – For single lane closure Standard D-704-38 – For east median crossover Standard D-704-39 – For west median crossover			
704-100	TRAFFIC CONTROL SUPERVISOR: Provide a Traffic Control Supervisor.		Place flaggers and traffic control devices as shown on Standard D-704-15, layout A at the intersection of US 2 and ND 1 when paving in the intersection.			
704-200	PRECAST CONCRETE MEDIAN BARRIERS – STATE FURNISHED: Obtain 36 barriers from Devils Lake District. Return barriers to Devils Lake District. Obtain 44 barriers from Grand Forks District. Return barriers to Grand Forks District.					

This document was originally issued and sealed by Sara A. Cahlin, Registration Number PE-8397, on 10/30/17 and the original document is stored at the North Dakota Department of Transportation.

ESTIMATE OF QUANTITIES

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-6-002(122)295	8	2

REVISED 10/31/2017

SPEC CODE	ITEM DESCRIPTION	UNIT	MAINLINE	TOTAL
704	1080 STACKABLE VERTICAL PANELS	EA	11	11
704	1087 SEQUENCING ARROW PANEL-TYPE C	EA	4	4
704	1088 SEQUENCING ARROW PANEL-TYPE C-CROSSOVER	EA	2	2
704	1500 OBLITERATION OF PAVEMENT MARKING	SF	4,963	4,963
704	3510 PRECAST CONCRETE MED BARRIER-STATE FURNISHED	EA	80	80
706	0400 FIELD OFFICE	EA	1	1
706	0500 AGGREGATE LABORATORY	EA	1	1
709	0151 GEOSYNTHETIC MATERIAL TYPE R1	SY	3,278	3,278
714	7036 PIPE PVC 18IN	LF	704	704
754	0112 FLAT SHEET FOR SIGNS-TYPE IV REFL SHEETING	SF	14	14
754	0206 STEEL GALV POSTS-TELESCOPING PERFORATED TUBE	LF	215	215
754	0592 RESET SIGN PANEL	EA	4	4
760	0001 RUMBLE STRIPS - CONCRETE SHOULDER	MILE	9.5	9.5
762	0103 PVMT MK PAINTED-MESSAGE	SF	52	52
762	0110 EPOXY PVMT MK 4IN LINE-GROOVED	LF	6,577	6,577
762	0113 EPOXY PVMT MK 4IN LINE	LF	100,983	100,983
762	0115 EPOXY PVMT MK 8IN LINE	LF	1,565	1,565
762	0117 EPOXY PVMT MK 24IN LINE	LF	65	65
762	0200 RAISED PAVEMENT MARKERS	EA	21,309	21,309
762	0430 SHORT TERM 4IN LINE-TYPE NR	LF	25,468	25,468
766	0100 MAILBOX-ALL TYPES	EA	3	3
772	2110 FLASHING BEACON-POST MOUNTED	EA	2	2
772	2935 REVISE FLASHING BEACON SYSTEM	EA	1	1

BASIS OF ESTIMATE

		West Xover		US 2 & ND 1		25.83 Stations		190.46 Stations		10.34 Stations		East Xover	
				Lakota Intersection Addn'l to Mainline		Lakota East 15597+20 to 15623+03		Michigan West 15894+15 to 16094+99					
		Xover		Intersection		Tangent & Curve		Tangent		Curve		Xover	
Material	Unit	Width (ft)	Quantity	Width (ft)	Quantity	Width (ft)	Quant/Sta	Width (ft)	Quant/Sta	Width (ft)	Quant/Sta	Width (ft)	Quantity
Aggregate Base CL 5 @ 1.5 Ton/CY +25%	Ton	21	494.1									21	679.0
Milling Pavement Surface	SY				1412.0	37.4	415.6	40.3	447.8	40.3	447.8		
Prime Coat @ 0.25 Gal/SY	Gal	21	292.0							8.1	22.5	21	350.2
Tack Coat @ 0.05 Gal/SY (1st lift)	Gal	21	58.4							8.1	4.5	21	70.0
Tack Coat @ 0.05 Gal/SY (2nd lift)	Gal	20.5	47.0							7.0	3.9	20.5	66.9
Relaying Milled Material @ 1.875 Ton/CY	Ton			varies	35.0	2 & 6	38.4	3 & 6	39.7	3 & 6	25.3		
7" PCC pavement	SY			varies	1695	27	300	27	300.0	27	300		
7" PCC Placement +5% for profile	CY			varies	346		61.3		61.3		61.3		
Superpave FAA 45 @ 2Ton/CY	Ton	20	200.7							6	13.0	20	297.1
PG 58-28 Asphalt Cement @ 6.0%	Ton		12.0								0.78		17.8
Imported Topsoil	CY			varies	13.9								

Permanent Pavement Marking (EB Roadway)		
Location - Type	Basis	Quantity
Centerline – Epoxy Pvmt MK 4IN Line - Grooved	Centerline Skips 1,320 LF/mile	6,297 LF
Edge Lines – Epoxy Pvmt MK 4IN Line	10,560 LF/mile	50,376 LF
Channel Lines – Epoxy Pvmt Mk 8IN Line	Lakota Left & Right Turn Lanes	925 LF
Stop Lines – Epoxy Pvmt Mk 24IN Line	ND 1 Intersection	65 LF
Permanent Pavement Marking (WB)		
Edge Line – Epoxy Pvmt Mk 4IN Line	5,280 LF/mile	50,387 LF
Hwy 1 Intersection		
Centerline – Epoxy Pvmt MK 4IN Line - Grooved	Dbl Barrier Stripe	280 LF
Edge Lines – Epoxy Pvmt MK 4IN Line		220 LF
Epoxy Pvmt MK 8IN Line	10 FT space Skewed at 45 degrees	640 LF
Traffic Control (WB Roadway)		
Obliteration of Pavement Marking	Centerline Skips	4,199 SF
Obliteration of Pavement Marking	Standards D-704-38 & 39 (WB & EB)	670 SF

Short Term 4 IN Line-Type NR		
Location	Basis	Quantity
Centerline – Milled Surface at Jct ND	Barrier Stripe	280 LF
Edge Line – WB Roadway	5,280 LF/mile	25,188 LF
Obliteration of Pavement Marking	Barrier Stripe	94 SF

Rumble Strips  
Concrete shoulder 9.5 miles

Mailboxes		
Station	Type	Work
15981+64 – Rt	Single	Replace
16041+95 – Rt	Single	Replace
16082+22 – Rt	Single	Replace

Existing Bituminous Cores	
RP	Core Depth (in)
295.62	14.25
295.80	14.75
301.00	16.25
301.25	8.75
301.50	11.50
301.75	9.25
302.00	14.50
302.14	16.00
302.25	10.50
302.50	14.75
302.75	15.50
303.00	12.00
303.25	15.50
303.50	11.50
303.75	14.25
304.00	10.50
304.25	11.25
304.50	14.00
304.75	17.50

Water  
25 MGal/Mile for Dust Palliative  
15 Gal/SY for Blended Base  
20 Gal/Ton for Aggregates  
10 Gal/CY for Embankment

This document was originally issued and sealed by Sarah BaeHurst, Registration Number PE-6239, on 10/31/17 and the original document is stored at the North Dakota Department of Transportation.

Revised 10/30/2017

[illegible]

**NOTE:**  
If additional signs are required, units will be calculated using the formula from Section III-19.06 of the Design Manual.  
<http://www.dot.nd.gov/>

This document was originally issued and sealed by Sara A. Cahlin, Registration Number PE-8397, on 10/30/17 and the original document is stored at the North Dakota Department of Transportation.

<p>Traffic Control Devices List</p> <p>Milling and PCC Overlay</p> <p>ND 1 E 0.5 Mi &amp; 5.5 Mi E ND 1 to ND 35</p>
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TABLE OF CONTENTS					LIST OF STANDARD DRAWINGS					
					Revised 10/10/2017		STATE	PROJECT NO.	SECTION NO.	SHEET NO.
					ND		NH-6-002(123)295		2	1
PLAN SECTIONS										
Section	Page(s)	Description	Number	Description						
1	1	Title Sheet	D-101-1, 2,3	NDDOT Abbreviations						
2	1	Table of Contents	D-101-10	NDDOT Utility Company and Organization Abbreviations						
4	1	Scope of Work	D-101-20, 21	Line Styles						
6	1	Notes	D-101-30, 31,32	Symbols						
8	1	Quantities	D-550-2	Longitudinal Joint Details						
10	1	Basis of Estimate	D-550-3	Transverse Contraction Joint Details						
11	1 - 12	Concrete Pavement Repair Tables	D-550-4	Transverse Expansion Joint Detail						
20	1 - 8	General Details	D-704-10	Construction Sign Details - Regulatory Signs						
30	1 - 2	Typical Sections	D-704-13	Barricade and Channelizing Device Details						
100	1	Work Zone Traffic Control	D-704-14	Construction Sign Punching and Mounting Details						
			D-704-50	Portable Sign Support Assembly						
			D-704-63	One Road Closure Four-Lane Divided Highway - for Access to Two-Way Two-Lane Roadway						
			D-760-2	Rumble Strips Divided Highways (Non-Interstate)						
			D-762-1	Pavement Marking Message Details						
			D-762-4	Pavement Marking						

Revised	10/10/2017	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
		ND	NH-6-002(123)295	2	1

NOTES

Revised 10/10/17

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-6-002(123)295	6	1

- 105-P01

PAVEMENT SWEEPING: Sweep paved areas that were used by construction traffic before opening these areas to public traffic
- 411-P01

RELAYING MILLED MATERIAL: This work consists of placing, shaping, and compacting material on the roadway shoulders.

Use one of the following materials:

- Asphalt millings from tied projects;

- Class 4 aggregate meeting the requirements of Section 816;

- Class 5 aggregate meeting the requirements of Section 816;

- Salvaged Base Course meeting the requirements of Section 817.

Use the same type of material throughout the project.

If asphalt millings are used, the following additional requirements apply:

- Provide material with a maximum particle size of 1.5 inches;

- Perform final shaping and compaction of shoulder material after grinding operations have been completed.

Such payment is full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.
- 570-P01

CONCRETE PAVEMENT REPAIR: An additional 20% has been added to the quantities for “Doweled Contraction Joint Assembly,” “8IN Conc Pvmt Repair – Full Depth – Doweled,” “Spall Repair – Partial Depth,” Random PCC Crack Cleaning & Sealing,” and “Epoxy coated Deformed Bars” to be used as directed by the Engineer.
- 570-P02

CONCRETE PAVEMENT REPAIR & PCC PAVEMENT GRINDING: An ATR site is located at RP 296.65. Disconnect the loop and sensor splices in the pull box near the roadway. Ensure the sensor array is disconnected prior to grinding or CPR work in the area.
- 570-P03

Phase repairs adjacent to median crossings to maintain access at county roads and private drives.
- 570-P04

TRANSVERSE JOINT CLEANING AND SEALING: Provide joint material that meets NDDOT Standard Specification 826.02 B.
- 704-100

TRAFFIC CONTROL SUPERVISOR: Provide a Traffic Control Supervisor.
- 704-P01

TRAFFIC CONTROL FOR CONCRETE PAVEMENT REPAIR: Traffic control consisting of median crossings and a road closure is provided for under tied project NH-6-002(122)295. There are 7 median cross overs for county roads or private drives that will be signed according to D-704-63.
- 762-050

PAVEMENT MARKING: If the Engineer and Contractor agree, plan quantity will be used as the measurement for payment for pavement marking items.

This document was originally issued and sealed by Caleb Christman, Registration Number PE-5542, on 10/10/17 and the original document is stored at the North Dakota Department of Transportation.

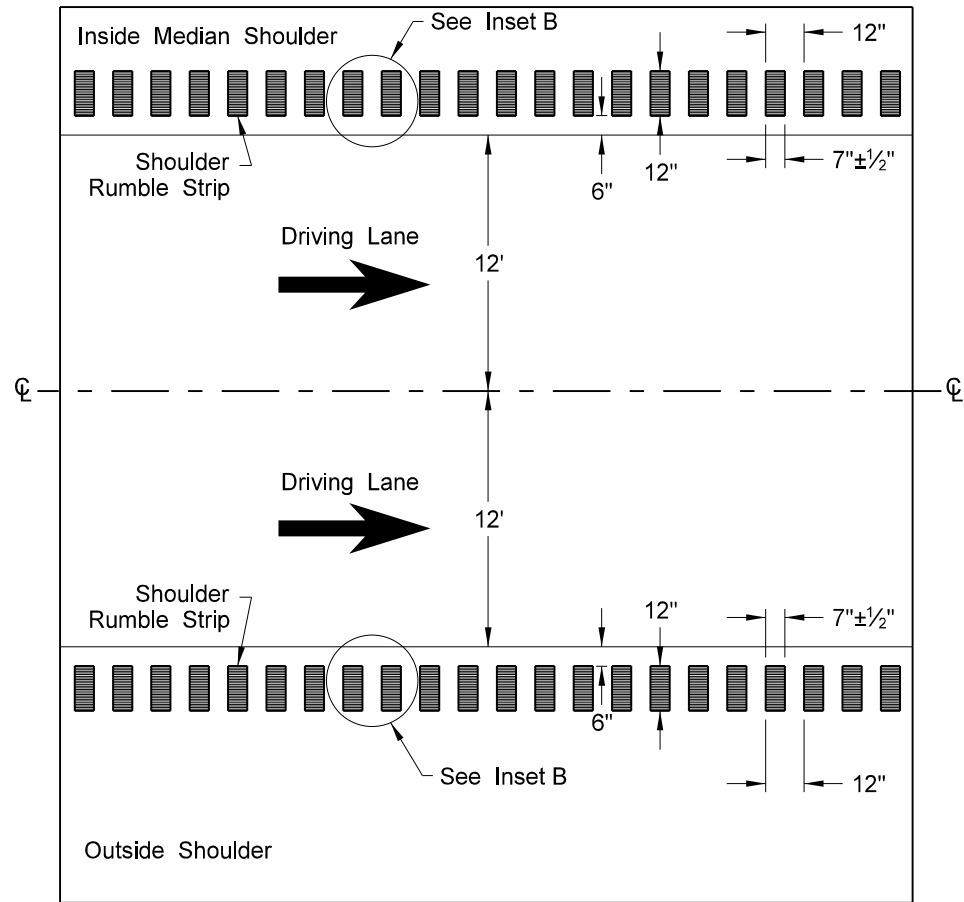
ESTIMATE OF QUANTITIES

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-6-002(123)295	8	1

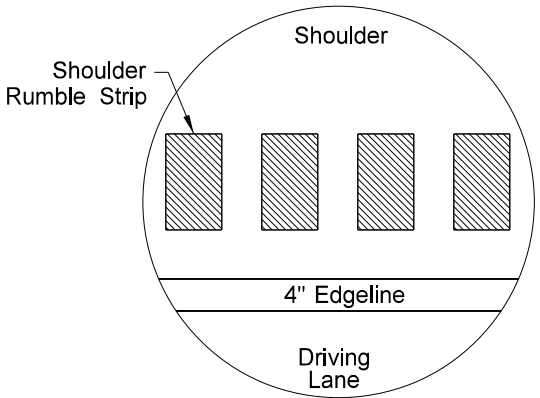
REVISED 10/10/2017

SPEC CODE	ITEM DESCRIPTION	UNIT	MAINLINE	TOTAL
-----	-----	----	-----	-----
103	0100 CONTRACT BOND	L SUM	0.12	0.12
411	0132 RELAYING MILLED MATERIAL	TON	1,627	1,627
570	0210 PCC PAVEMENT GRINDING	SY	41,495	41,495
570	0240 DOWELED CONTRACTION JOINT ASSEMBLY	LF	342	342
570	0713 8IN CONCRETE PAVEMENT REPAIR-FULL DEPTH-DOWELED	SY	1,367	1,367
570	0963 TRANSVERSE PCC JOINT CLEANING & SEALING	LF	54,050	54,050
570	0965 LONGITUDINAL PCC JOINT CLEANING & SEALING	LF	26,611	26,611
570	0966 RANDOM PCC CRACK CLEANING & SEALING	LF	2,975	2,975
570	1512 SPALL REPAIR-PARTIAL DEPTH	SF	2,090	2,090
702	0100 MOBILIZATION	L SUM	0.12	0.12
704	0100 FLAGGING	MHR	240	240
704	1000 TRAFFIC CONTROL SIGNS	UNIT	1,310	1,310
704	1050 TYPE I BARRICADE	EA	30	30
704	1052 TYPE III BARRICADE	EA	50	50
760	0001 RUMBLE STRIPS - CONCRETE SHOULDER	MILE	0.138	0.138
762	0110 EPOXY PVMT MK 4IN LINE-GROOVED	LF	6,636	6,636
762	0112 EPOXY PVMT MK MESSAGE	SF	96	96
762	0113 EPOXY PVMT MK 4IN LINE	LF	53,086	53,086
762	0115 EPOXY PVMT MK 8IN LINE	LF	705	705

RUMBLE STRIPS  
DIVIDED HIGHWAYS (NON-INTERSTATE)



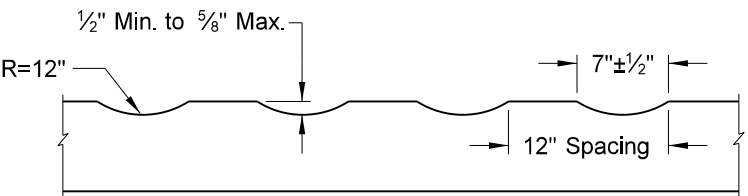
Divided Highways (Non-Interstate)



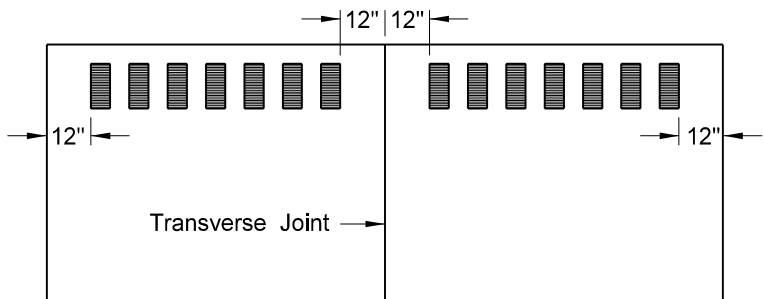
Inset B - Shoulder Rumble Strip

NOTES:

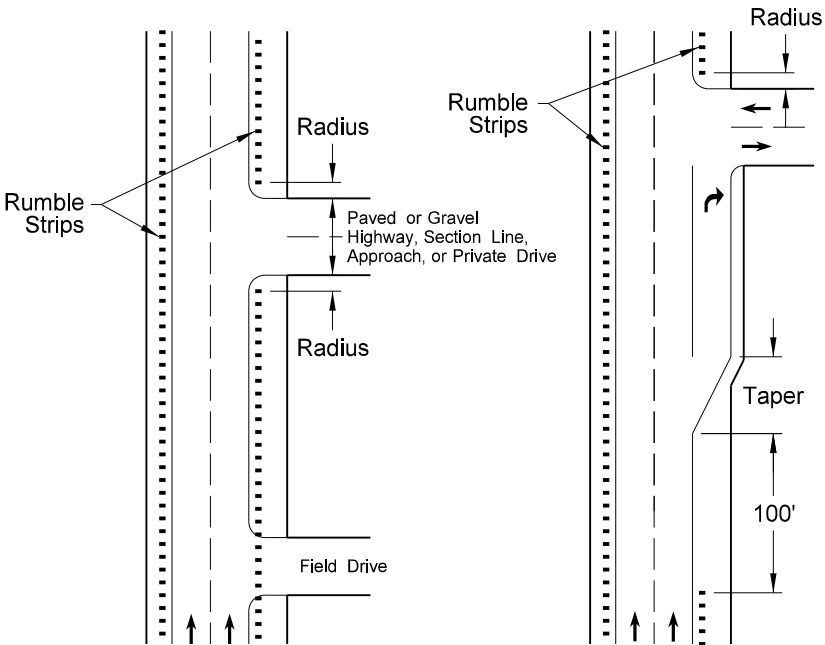
1) Discontinue rumble strips through the entire length of turn lanes & ramps, 100' before turn lane tapers, 100' before or after ramp tapers, and at the radius of a paved or gravel highway, section line, approach, or private drive as shown below.



Profile of Rumble Strips - Bituminous and PCC Pavements

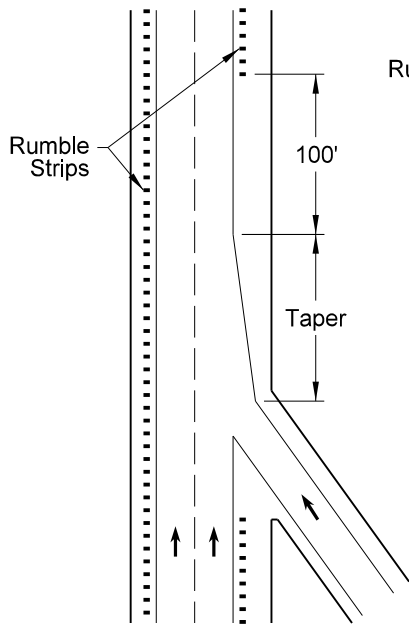


Discontinue rumble strip approx. 12" on both sides of PCC transverse joint

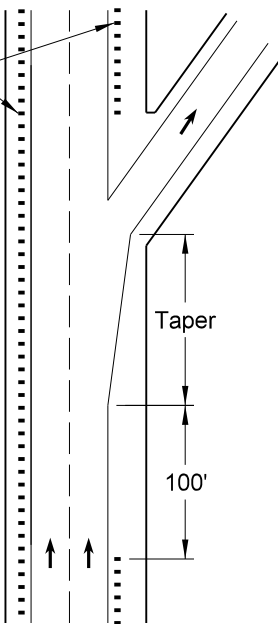


Entrance Roadways

Turn Lane  
(Right & Left)



Entrance Ramp



Exit Ramp

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
12-29-09	
REVISIONS	
DATE	CHANGE
2-25-10	Note 4 was added.
9-8-11	Revised Notes and D-760-2.

This document was originally issued and sealed by Roger Weigel, Registration Number PE- 2930 , on 9/8/11 and the original document is stored at the North Dakota Department of Transportation