

December 6, 2023

**ADDENDUM 3 – JOB 23343**

**TO:** All prospective bidders on Projects SS-6-999(050), Job No. 23343 scheduled for the December 8, 2023 bid opening.

The following revision(s) shall be made:

**Plan Revisions:**

See attached summary from Kirk J. Hoff, P.E. dated December 6, 2023 for an explanation.

**Request for Proposal Revisions:**

- Remove and replace pages 5 thru 10 of 12 of the Proposal pages located at the beginning of the Request for Proposal with pages revised December 6, 2023.
- Bid Item Changes are summarized in the Plan Addendum Summary and Approval.

This addendum is to be incorporated into the bidder's proposal for this project. AASHTOWare 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, P.E. – CONSTRUCTION SERVICES ENGINEER

80: jwj

Enclosure

**PLAN ADDENDUM SUMMARY AND APPROVAL**

PROJECT INFORMATION		
<b>Project:</b> SS-6-999(050)	<b>PCN:</b> 23343	
<b>Location:</b> Grand Forks, Griggs & Pembina Cos: Various US/State Highways – Grand Forks District		
<b>Date:</b> 12/6/2023	<b>Lead Designer:</b> Gayle Cox	
<b>Bid Opening Date:</b> 12/8/2023	<b>JOB#:</b> 23343	<b>Addendum#:</b> 3

PLAN SHEET CHANGES		
Section	Sheet	Description
8	1-2	Sheet Revised: See chart below
100	3	Revised bid item quantity for 704 1500 OBLITERATION OF PVMT MK. Deleted item 772-2110 FLASHING BEACON – POST MOUNTED. Added bid item 704-1090 FLASHING BEACON.

CHANGES MADE TO BID ITEMS FOR JOB					
Spec	Code	Description	Unit	Previous Quantity	Revised Quantity
704	1090	FLASHING BEACON	EACH	0	2
704	1500	OBLITERATION OF PVMT MK	SF	4550	1370
772	2110	FLASHING BEACON – POST MOUNTED	EACH	2	0

**APPROVAL**

Should the revisions described above be processed as a plan addendum?

Yes                       No

*Kirk J Hoff*  
 Kirk J. Hoff, P.E. – Design Engineer

12/6/2023  
 Date

BID ITEMS

Project: SS-6-999(050) (PCN-23343)

**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
001	103	0100	CONTRACT BOND	L SUM	1.				
002	202	0104	REMOVAL OF STRUCTURE	EA	4.				
003	202	0114	REMOVAL OF CONCRETE PAVEMENT	SY	2,862.				
004	202	0132	REMOVAL OF BITUMINOUS SURFACING	SY	1,853.				
005	202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES	LF	190.				
006	202	0312	REMOVE EXISTING FENCE	LF	1,384.				
007	202	0350	REMOVAL OF TEMPORARY BYPASS	EA	4.				
008	203	0101	COMMON EXCAVATION-TYPE A	CY	1,298.				
009	203	0109	TOPSOIL	CY	4,036.				
010	203	0140	BORROW-EXCAVATION	CY	12,324.				
011	210	0050	BOX CULVERT EXCAVATION	EA	2.				
012	210	0210	FOUNDATION FILL	CY	6,638.				
013	210	0405	FOUNDATION PREPARATION-BOX CULVERT	EA	2.				
014	216	0100	WATER	M GAL	569.				
015	251	0200	SEEDING CLASS II	ACRE	4.570				
016	251	2000	TEMPORARY COVER CROP	ACRE	4.570				

BID ITEMS

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
017	253	0101	STRAW MULCH	ACRE	9.140				
018	255	0102	ECB TYPE 2	SY	361.				
019	256	0200	RIPRAP GRADE II	CY	164.				
020	261	0112	FIBER ROLLS 12IN	LF	10,600.				
021	261	0113	REMOVE FIBER ROLLS 12IN	LF	4,881.				
022	262	0100	FLOTATION SILT CURTAIN	LF	183.				
023	262	0101	REMOVE FLOTATION SILT CURTAIN	LF	183.				
024	302	0050	TRAFFIC SERVICE AGGREGATE	TON	730.				
025	302	0120	AGGREGATE BASE COURSE CL 5	TON	7,228.				
026	430	0500	COMMERCIAL GRADE HOT MIX ASPHALT	TON	2,415.				
027	550	0305	9IN NON-REINF CONCRETE PVMT CL AE-DOWELED	SY	1,153.				
028	550	0310	10IN NON REINF CONCRETE PVMT CL AE-DOWELED	SY	1,229.				
029	606	0603	6FT X 3FT PRECAST RCB CULVERT	LF	140.				
030	606	3006	DBL 10FT X 6FT PRECAST RCB CULVERT	LF	464.				
031	606	4603	6FT X 3FT PRECAST RCB END SECTION	EA	4.				
032	606	7006	DBL 10FT X 6FT PRECAST RCB END SECTION	EA	4.				

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
033	624	3005	CONNECTION PLATE MODIFICATION	EA	1.				
034	702	0100	MOBILIZATION	L SUM	1.				
035	704	1000	TRAFFIC CONTROL SIGNS	UNIT	3,436.				
036	704	1018	LANE CLOSURE-SIGNAL CONTROL/FLAGGING CONTROL	EA	1.				
037	704	1036	ATTENUATION DEVICE-TYPE B-30	EA	4.				
038	704	1045	ATTENUATION DEVICE-TYPE B-75	EA	4.				
039	704	1052	TYPE III BARRICADE	EA	24.				
040	704	1060	DELINEATOR DRUMS	EA	74.				
041	704	1067	TUBULAR MARKERS	EA	92.				
042	704	1072	FLEXIBLE DELINEATORS	EA	41.				
043	704	1080	STACKABLE VERTICAL PANELS	EA	55.				
044	704	1081	VERTICAL PANELS-BACK TO BACK	EA	6.				
045	704	1088	SEQUENCING ARROW PANEL-TYPE C-CROSSOVER	EA	2.				
046	704	1090	FLASHING BEACON	EA	2.				
047	704	1500	OBLITERATION OF PAVEMENT MARKING	SF	1,370.				
048	704	3511	STATE FURNISHED MEDIAN BARRIER	LF	1,550.				

BID ITEMS

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
049	704	8015	VEHICLE SPEED FEEDBACK SIGN	EA	1.				
050	706	0400	FIELD OFFICE	EA	1.				
051	706	0500	AGGREGATE LABORATORY	EA	1.				
052	709	0100	GEOSYNTHETIC MATERIAL TYPE G	SY	7,212.				
053	709	0155	GEOSYNTHETIC MATERIAL TYPE RR	SY	1,607.				
054	714	4099	PIPE CONDUIT 18IN-APPROACH	LF	1,008.				
055	714	4150	PIPE CONDUIT 78IN	LF	358.				
056	714	4155	PIPE CONDUIT 84IN	LF	26.				
057	714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES	EA	2.				
058	720	0110	RIGHT OF WAY MARKERS	EA	3.				
059	720	0130	IRON PIN R/W MONUMENTS	EA	3.				
060	752	0320	FENCE BARBED WIRE 4 STRAND-STEEL POST	LF	1,241.				
061	752	0905	TEMPORARY FENCE	LF	913.				
062	752	3150	CORNER ASSEMBLY BARBED WIRE-WOOD POST	EA	8.				
063	754	0110	FLAT SHEET FOR SIGNS-TYPE XI REFL SHEETING	SF	13.				
064	754	0112	FLAT SHEET FOR SIGNS-TYPE IV REFL SHEETING	SF	25.				

BID ITEMS

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$\$	000	\$\$\$\$\$	00
065	754	0206	STEEL GALV POSTS-TELESCOPING PERFORATED TUBE	LF	64.				
066	754	0592	RESET SIGN PANEL	EA	1.				
067	754	0596	RESET MILE POST	EA	1.				
068	754	0803	OBJECT MARKERS - TYPE III	EA	8.				
069	754	0805	OBJECT MARKERS - CULVERTS	EA	4.				
070	760	0021	SINUSOIDAL RUMBLE STRIP - CONCRETE SHOULDER	MILE	.200				
071	760	0025	SINUSOIDAL RUMBLE STRIP - ASPHALT SHOULDER	MILE	.120				
072	760	0027	SINUSOIDAL RUMBLE STRIP - ASPHALT CENTERLINE	MILE	.060				
073	762	0110	EPOXY PVMT MK 4IN LINE-GROOVED	LF	1,054.				
074	762	0113	EPOXY PVMT MK 4IN LINE	LF	675.				
075	762	0200	RAISED PAVEMENT MARKERS	EA	2,378.				
076	762	0422	SHORT TERM 6IN LINE-TYPE R	LF	6,360.				
077	762	0430	SHORT TERM 4IN LINE-TYPE NR	LF	150.				
078	762	1305	PREFORMED PATTERNED PVMT MK 4IN LINE-GROOVED	LF	132.				
079	764	0145	W-BEAM GUARDRAIL END TERMINAL	EA	2.				
080	764	0151	REMOVE W-BEAM GUARDRAIL & POSTS	LF	975.				

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
081	764	2081	REMOVE END TREATMENT & TRANSITION	EA	6.				
082	900	1001	TEMPORARY STREAM DIVERSION - SITE 1	EA	1.				
083	900	1002	TEMPORARY STREAM DIVERSION - SITE 2	EA	1.				
084	900	1003	TEMPORARY STREAM DIVERSION - SITE 3	EA	1.				
			<b>TOTAL SUM BID</b>						



Estimated Quantities

Revised 11/30/2023	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
Revised 12/6/2023	ND	SS-6-999(050)	8	1

SPEC	CODE	ITEM DESCRIPTION	UNIT	SITE 1	SITE 2	SITE 3	TOTAL
103	0100	CONTRACT BOND	L SUM	0.34	0.33	0.33	1
202	0104	REMOVAL OF STRUCTURE	EA	1	2	1	4
202	0114	REMOVAL OF CONCRETE PAVEMENT	SY		2862		2862
202	0132	REMOVAL OF BITUMINOUS SURFACING	SY	112	641	1100	1853
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES	LF			190	190
202	0312	REMOVE EXISTING FENCE	LF		409	975	1384
202	0350	REMOVAL OF TEMPORARY BYPASS	EA		2	2	4
203	0101	COMMON EXCAVATION-TYPE A	CY	234	1051	13	1298
203	0109	TOPSOIL	CY	200	2814	1022	4036
203	0140	BORROW-EXCAVATION	CY	238	3832	8254	12324
210	0050	BOX CULVERT EXCAVATION	EA	1	1		2
210	0210	FOUNDATION FILL	CY	705	5933		6638
210	0405	FOUNDATION PREPARATION-BOX CULVERT	EA	1	1		2
216	0100	WATER	M GAL	40	421	108	569
251	0200	SEEDING CLASS II	ACRE	0.26	2	2.31	4.57
251	2000	TEMPORARY COVER CROP	ACRE	0.26	2	2.31	4.57
253	0101	STRAW MULCH	ACRE	0.52	4	4.62	9.14
255	0102	ECB TYPE 2	SY			361	361
256	0200	RIPRAP GRADE II	CY	35	129		164
261	0112	FIBER ROLLS 12IN	LF	908	6237	3455	10600
261	0113	REMOVE FIBER ROLLS 12IN	LF	504	2722	1655	4881
262	0100	FLOTATION SILT CURTAIN	LF	27	43	113	183
262	0101	REMOVE FLOTATION SILT CURTAIN	LF	27	43	113	183
302	0050	TRAFFIC SERVICE AGGREGATE	TON			730	730
302	0120	AGGREGATE BASE COURSE CL 5	TON	218	6785	225	7228
430	0500	COMMERCIAL GRADE HOT MIX ASPHALT	TON	85	1869	461	2415
550	0305	9IN NON-REINF CONCRETE PVMT CL AE-DOWELED	SY		1153		1153
550	0310	10IN NON REINF CONCRETE PVMT CL AE-DOWELED	SY		1229		1229
606	0603	6FT X 3FT PRECAST RCB CULVERT	LF	140			140
606	3006	DBL 10FT X 6FT PRECAST RCB CULVERT	LF		464		464
606	4603	6FT X 3FT PRECAST RCB END SECTION	EA	4			4
606	7006	DBL 10FT X 6FT PRECAST RCB END SECTION	EA		4		4
624	3005	CONNECTION PLATE MODIFICATION	EA		1		1
702	0100	MOBILIZATION	L SUM	0.34	0.33	0.33	1
704	1000	TRAFFIC CONTROL SIGNS	UNIT	600	1986	850	3436
704	1018	LANE CLOSURE-SIGNAL CONTROL/FLAGGING CONTROL	EA			1	1
704	1036	ATTENUATION DEVICE-TYPE B-30	EA			4	4
704	1045	ATTENUATION DEVICE-TYPE B-75	EA		4		4
704	1052	TYPE III BARRICADE	EA	7	7	10	24
704	1060	DELINEATOR DRUMS	EA	8	54	12	74
704	1067	TUBULAR MARKERS	EA	28	64		92
704	1072	FLEXIBLE DELINEATORS	EA		41		41
704	1080	STACKABLE VERTICAL PANELS	EA			55	55
704	1081	VERTICAL PANELS-BACK TO BACK	EA		6		6
704	1088	SEQUENCING ARROW PANEL-TYPE C-CROSSOVER	EA		2		2
704	1090	FLASHING BEACON	EA		2		2
704	1500	OBLITERATION OF PAVEMENT MARKING	SF		1370		1370

Estimated Quantities

Revised 11/30/2023	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
Revised 12/6/2023	ND	SS-6-999(050)	8	2

SPEC	CODE	ITEM DESCRIPTION	UNIT	SITE 1	SITE 2	SITE 3	TOTAL
704	3511	STATE FURNISHED MEDIAN BARRIER	LF		1190	360	1550
704	8015	VEHICLE SPEED FEEDBACK SIGN	EA		1		1
706	0400	FIELD OFFICE	EA			1	1
706	0500	AGGREGATE LABORATORY	EA			1	1
709	0100	GEOSYNTHETIC MATERIAL TYPE G	SY	179	7033		7212
709	0155	GEOSYNTHETIC MATERIAL TYPE RR	SY	92	1515		1607
714	4099	PIPE CONDUIT 18IN-APPROACH	LF		1008		1008
714	4150	PIPE CONDUIT 78IN	LF			358	358
714	4155	PIPE CONDUIT 84IN	LF			26	26
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES	EA			2	2
720	0110	RIGHT OF WAY MARKERS	EA	3			3
720	0130	IRON PIN R/W MONUMENTS	EA	3			3
752	0320	FENCE BARBED WIRE 4 STRAND-STEEL POST	LF		290	951	1241
752	0905	TEMPORARY FENCE	LF		253	660	913
752	3150	CORNER ASSEMBLY BARBED WIRE-WOOD POST	EA		4	4	8
754	0110	FLAT SHEET FOR SIGNS-TYPE XI REFL SHEETING	SF	13			13
754	0112	FLAT SHEET FOR SIGNS-TYPE IV REFL SHEETING	SF	25			25
754	0206	STEEL GALV POSTS-TELESCOPING PERFORATED TUBE	LF	64			64
754	0592	RESET SIGN PANEL	EA	1			1
754	0596	RESET MILE POST	EA			1	1
754	0803	OBJECT MARKERS - TYPE III	EA	4	4		8
754	0805	OBJECT MARKERS - CULVERTS	EA			4	4
760	0021	SINUSOIDAL RUMBLE STRIP - CONCRETE SHOULDER	MILE		0.2		0.2
760	0025	SINUSOIDAL RUMBLE STRIP - ASPHALT SHOULDER	MILE			0.12	0.12
760	0027	SINUSOIDAL RUMBLE STRIP - ASPHALT CENTERLINE	MILE			0.06	0.06
762	0110	EPOXY PVMT MK 4IN LINE-GROOVED	LF		1054		1054
762	0113	EPOXY PVMT MK 4IN LINE	LF			675	675
762	0200	RAISED PAVEMENT MARKERS	EA		2378		2378
762	0422	SHORT TERM 6IN LINE-TYPE R	LF		6360		6360
762	0430	SHORT TERM 4IN LINE-TYPE NR	LF			150	150
762	1305	PREFORMED PATTERNED PVMT MK 4IN LINE-GROOVED	LF		132		132
764	0145	W-BEAM GUARDRAIL END TERMINAL	EA		2		2
764	0151	REMOVE W-BEAM GUARDRAIL & POSTS	LF			975	975
764	2081	REMOVE END TREATMENT & TRANSITION	EA			6	6
900	1001	TEMPORARY STREAM DIVERSION - SITE 1	EA	1			1
900	1002	TEMPORARY STREAM DIVERSION - SITE 2	EA		1		1
900	1003	TEMPORARY STREAM DIVERSION - SITE 3	EA			1	1

SIGN NUMBER	SIGN SIZE	DESCRIPTION	AMOUNT REQUIRED					TOTAL AMOUNT REQUIRED	UNITS PER AMOUNT	UNITS SUB TOTAL
			BY PHASE NO.							
			1	2	3	4	5			
E5-1-48	48"x48"	EXIT GORE						35		
G20-1-60	60"x24"	ROAD WORK NEXT MILES						28		
G20-1b-60	60"x24"	NO WORK IN PROGRESS (Sign and installation only)						18		
<b>G20-2-48</b>	<b>48"x24"</b>	<b>END ROAD WORK</b>	<b>4</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>4</b>	<b>26</b>	<b>104</b>	
G20-4-36	36"x18"	PILOT CAR FOLLOW ME (Mounted to back of pilot car)						18		
G20-4b-36	36"x30"	WAIT FOR PILOT CAR						18		
G20-50a-72	72"x36"	ROAD WORK NEXT MILES RT & LT ARROWS						43		
G20-52a-72	72"x24"	ROAD WORK NEXT MILES RT or LT ARROW						36		
<b>G20-55-96</b>	<b>96"x48"</b>	<b>SPEED LIMIT ENFORCED - MINIMUM FEE \$80 WHEN WORKERS PRESENT</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>59</b>	<b>236</b>	
M1-1-36	36"x36"	INTERSTATE ROUTE MARKER (Post and installation only)						11		
M1-4-24	24"x24"	U.S. ROUTE MARKER (Post and installation only)						10		
M1-5-24	24"x24"	STATE ROUTE MARKER (Post and installation only)						10		
M3-1-24	24"x12"	NORTH (Mounted on route marker post)						7		
M3-2-24	24"x12"	EAST (Mounted on route marker post)						7		
M3-3-24	24"x12"	SOUTH (Mounted on route marker post)						7		
M3-4-24	24"x12"	WEST (Mounted on route marker post)						7		
M4-8-24	24"x12"	DETOUR (Mounted on route marker post)						7		
M4-9-30	30"x24"	DETOUR ARROW RIGHT or LEFT/AHD AND RT or LT						15		
M4-10-48	48"x18"	DETOUR (INSIDE ARROW) RIGHT or LEFT (Mounted on barricade)						7		
M5-1-21	21"x15"	ADVANCE TURN ARROW RT or LT(Mounted on route marker post)						7		
M5-1-30	30"x21"	ADVANCE TURN ARROW RT or LT(Mounted on route marker post)						9		
M6-1-21	21"x15"	DIRECTIONAL ARROW RT or LT (Mounted on route marker post)						7		
M6-1-30	30"x21"	DIRECTIONAL ARROW RT or LT (Mounted on route marker post)						9		
M6-3-21	21"x15"	DIRECTIONAL ARROW UP (Mounted on route marker post)						7		
R1-1-48	48"x48"	STOP						32		
R1-2-60	60"x60"	YIELD						29		
<b>R2-1-36</b>	<b>36"x48"</b>	<b>SPEED LIMIT (Portable only)</b>	<b>4</b>		<b>4</b>		<b>4</b>	<b>30</b>	<b>120</b>	
<b>R2-1-48</b>	<b>48"x60"</b>	<b>SPEED LIMIT</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>39</b>	<b>312</b>	
<b>R2-1aP-24</b>	<b>24"x18"</b>	<b>MINIMUM FEE \$80 (Mounted on Speed Limit post)</b>	<b>8</b>	<b>6</b>	<b>8</b>	<b>6</b>	<b>8</b>	<b>10</b>	<b>80</b>	
R3-2-48	48"x48"	NO LEFT TURN						35		
<b>R4-1-48</b>	<b>48"x60"</b>	<b>DO NOT PASS</b>		<b>2</b>	<b>2</b>		<b>2</b>	<b>39</b>	<b>78</b>	
<b>R4-7-48</b>	<b>48"x60"</b>	<b>KEEP RIGHT</b>		<b>2</b>	<b>2</b>		<b>2</b>	<b>39</b>	<b>78</b>	
R5-1-48	48"x48"	DO NOT ENTER						35		
R6-1-54	54"x18"	ONE WAY RIGHT or LEFT (Mounted on STOP or DO NOT ENTER post)						14		
R7-1-12	12"x18"	NO PARKING ANY TIME						11		
R10-6-24	24"x36"	STOP HERE ON RED						16		
<b>R11-2-48</b>	<b>48"x30"</b>	<b>ROAD CLOSED (Mounted on barricade)</b>	<b>2</b>	<b>2</b>			<b>2</b>	<b>12</b>	<b>24</b>	
R11-2a-48	48"x30"	STREET CLOSED (Mounted on barricade)						12		
R11-3a-60	60"x30"	ROAD CLOSED MILES AHEAD LOCAL TRAFFIC ONLY (Mtd on barricade)						15		
R11-3c-60	60"x30"	STREET CLOSED MILES AHEAD LOCAL TRAFFIC ONLY (Mtd on barricade)						15		
R11-4a-60	60"x30"	STREET CLOSED TO THRU TRAFFIC (Mounted on barricade)						15		
W1-3-48	48"x48"	REVERSE TURN RIGHT or LEFT						35		
<b>W1-4-48</b>	<b>48"x48"</b>	<b>REVERSE CURVE RIGHT or LEFT</b>	<b>2</b>	<b>2</b>			<b>2</b>	<b>35</b>	<b>70</b>	
W1-4b-48	48"x48"	TWO LANE REVERSE CURVE RIGHT or LEFT						35		
W1-6-48	48"x24"	ONE DIRECTION LARGE ARROW						26		
<b>W1-6-60</b>	<b>60"x30"</b>	<b>ONE DIRECTION LARGE ARROW</b>	<b>2</b>	<b>2</b>			<b>2</b>	<b>31</b>	<b>62</b>	
W3-1-48	48"x48"	STOP AHEAD						35		
W3-3-48	48"x48"	SIGNAL AHEAD						35		
W3-4-48	48"x48"	BE PREPARED TO STOP						35		
<b>W3-5-48</b>	<b>48"x48"</b>	<b>SPEED REDUCTION AHEAD</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>35</b>	<b>140</b>	
<b>W4-2-48</b>	<b>48"x48"</b>	<b>LANE ENDS RIGHT or LEFT</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>35</b>	<b>140</b>	
W5-1-48	48"x48"	ROAD NARROWS						35		
W5-8-48	48"x48"	THRU TRAFFIC RIGHT LANE						35		
W5-9-48	48"x48"	ROAD WORK TRAFFIC ONLY DOWN & LT or RT ARROW						35		
<b>W6-3-48</b>	<b>48"x48"</b>	<b>TWO WAY TRAFFIC</b>	<b>2</b>	<b>2</b>			<b>2</b>	<b>35</b>	<b>70</b>	
W8-1-48	48"x48"	BUMP						35		
W8-3-48	48"x48"	PAVEMENT ENDS						35		
W8-7-48	48"x48"	LOOSE GRAVEL						35		
W8-11-48	48"x48"	UNEVEN LANES						35		
W8-12-48	48"x48"	NO CENTER LINE						35		
W8-17-48	48"x48"	SHOULDER DROP-OFF SYMBOL						35		
W8-53-48	48"x48"	TRUCKS ENTERING HIGHWAY						35		
W8-54-48	48"x48"	TRUCKS ENTERING AHEAD or FT or MILE						35		
W8-55-48	48"x48"	TRUCKS CROSSING AHEAD or FT or MILE						35		
W8-56-48	48"x48"	TRUCKS EXITING HIGHWAY						35		
W9-3a-48	48"x48"	CENTER LANE CLOSED SYMBOL						35		
<b>W13-1P-30</b>	<b>30"x30"</b>	<b>MPH ADVISORY SPEED PLAQUE (Mounted on warning sign post)</b>	<b>2</b>	<b>2</b>			<b>2</b>	<b>14</b>	<b>28</b>	
W14-3-64	64"x48"	NO PASSING ZONE						28		
W16-2P-30	30"x24"	FEET PLAQUE (Mounted on warning sign post)						10		
<b>W20-1-48</b>	<b>48"x48"</b>	<b>ROAD WORK AHEAD or FT or MILE</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>35</b>	<b>140</b>	
W20-2-48	48"x48"	DETOUR AHEAD or FT or MILE						35		
W20-3-48	48"x48"	ROAD or STREET CLOSED AHEAD or FT or MILE						35		
W20-4-48	48"x48"	ONE LANE ROAD AHEAD or FT or MILE						35		
<b>W20-5-48</b>	<b>48"x48"</b>	<b>RIGHT or CENTER or LEFT LANE CLOSED AHEAD or FT or MILE</b>	<b>4</b>	<b>8</b>	<b>4</b>	<b>8</b>	<b>4</b>	<b>35</b>	<b>280</b>	
W20-7-48	48"x48"	FLAGGER						35		
W20-8-18	18"x18"	STOP - SLOW PADDLE Back to Back						5		
<b>W20-52P-54</b>	<b>54"x12"</b>	<b>NEXT MILES (Mounted on warning sign post)</b>	<b>2</b>	<b>2</b>			<b>2</b>	<b>12</b>	<b>24</b>	
W21-1-48	48"x48"	WORKERS						35		
W21-2-48	48"x48"	FRESH OIL						35		
W21-3-48	48"x48"	ROAD MACHINERY AHEAD or FT or MILE						35		
W21-5-48	48"x48"	SHOULDER WORK						35		
W21-5a-48	48"x48"	RIGHT or LEFT SHOULDER CLOSED						35		

SIGN NUMBER	SIGN SIZE	DESCRIPTION	AMOUNT REQUIRED					TOTAL AMOUNT REQUIRED	UNITS PER AMOUNT	UNITS SUB TOTAL
			BY PHASE NO.							
			1	2	3	4	5			
W21-5b-48	48"x48"	RIGHT or LEFT SHOULDER CLOSED AHEAD or FT or MILE						35		
W21-6-48	48"x48"	SURVEY CREW						35		
W21-50-48	48"x48"	BRIDGE PAINTING AHEAD or FT						35		
W21-51-48	48"x48"	MATERIAL ON ROADWAY						35		
W21-52-48	48"x48"	PAVEMENT BREAKS						35		
W21-53-48	48"x48"	RUMBLE STRIPS AHEAD						35		
W22-8-48	48"x48"	FRESH OIL LOOSE ROCK						35		
W24-1-48	48"x48"	DOUBLE REVERSE CURVE						35		

SPEC & CODE		TOTAL UNITS
704-1000	TRAFFIC CONTROL SIGNS	1986

SPEC & CODE	DESCRIPTION	UNIT	QUANTITY					TOTAL QUANTITY
			BY PHASE NO.					
			1	2	3	4	5	
704-0100	FLAGGING	MHR						
704-1041	ATTENUATION DEVICE-TYPE B-55	EACH						
<b>704-1045</b>	<b>ATTENUATION DEVICE-TYPE B-75</b>	EACH		<b>2</b>		<b>2</b>		<b>2</b>
704-1048	PORTABLE RUMBLE STRIPS	EACH						
704-1050	TYPE I BARRICADES	EACH						
<b>704-1052</b>	<b>TYPE III BARRICADES</b>	EACH	<b>2</b>	<b>7</b>	<b>2</b>	<b>7</b>	<b>2</b>	<b>7</b>
<b>704-1060</b>	<b>DELINEATOR DRUMS</b>	EACH	<b>54</b>	<b>53</b>	<b>54</b>	<b>53</b>	<b>54</b>	<b>54</b>
704-1065	TRAFFIC CONES	EACH						
<b>704-1067</b>	<b>TUBULAR MARKERS</b>	EACH	<b>64</b>		<b>64</b>		<b>64</b>	<b>64</b>
704-1070	DELINEATOR	EACH						
<b>704-1072</b>	<b>FLEXIBLE DELINEATORS</b>	EACH		<b>41</b>		<b>41</b>		<b>41</b>
704-1080	STACKABLE VERTICAL PANELS	EACH						
704-1081	VERTICAL PANELS - BACK TO BACK	EACH						
704-1085	SEQUENCING ARROW PANEL - TYPE A	EACH						
704-1086	SEQUENCING ARROW PANEL - TYPE B	EACH						
<b>704-1087</b>	<b>SEQUENCING ARROW PANEL - TYPE C</b>	EACH	<b>2</b>		<b>2</b>		<b>2</b>	<b>2</b>
<b>704-1088</b>	<b>SEQUENCING ARROW PANEL - TYPE C - CROSSOVER</b>	EACH		<b>2</b>		<b>2</b>		<b>2</b>
<b>704-1090</b>	<b>FLASHING BEACON</b>	EA		<b>2</b>		<b>2</b>		<b>2</b>
<b>704-1500</b>	<b>OBLITERATION OF PVMT MK</b>	SF		<b>685</b>		<b>685</b>		<b>1370</b>
704-3501	PORTABLE PRECAST CONCRETE MED BARRIER	LF						
704-3510	PRECAST CONCRETE MED BARRIER - STATE FURNISHED	EACH						
<b>704-3511</b>	<b>STATE FURNISHED MEDIAN BARRIER</b>	LF		<b>790</b>		<b>1190</b>		<b>1190</b>
<b>762-0200</b>	<b>RAISED PAVEMENT MARKERS</b>	EACH		<b>1189</b>		<b>1189</b>		<b>2378</b>
762-0420	SHORT TERM 4IN LINE - TYPE R	LF						
<b>762-0422</b>	<b>SHORT TERM 6IN LINE-TYPE R</b>	LF		<b>3180</b>		<b>3180</b>		<b>6360</b>
762-0430	SHORT TERM 4IN LINE - TYPE NR	LF						

NOTE:  
If additional signs are required, units will be calculated using the formula from Section III-18.06 of the Design Manual.  
<http://www.dot.nd.gov/>



Traffic Control Devices List  
Site #2  
Structure Replacement  
Grand Forks County  
4 Miles South of Manvel