

**INDIANA  
DEPARTMENT OF TRANSPORTATION**

**CONTRACT INFORMATION**

**CONSTRUCTION PLANS  
SPECIAL PROVISIONS  
ADDITIONAL CONTRACT REQUIREMENTS**

**FOR**

**CONTRACT NO.** \_\_\_\_\_

**LETTING DATE:** \_\_\_\_\_

Certified By \_\_\_\_\_

Date \_\_\_\_\_

CONTRACT INFORMATION  
TABLE OF CONTENTS

CONTRACT NO.

This book shall be examined to determine that each page set out in the Contract Information Table of Contents, and the Special Provisions Table of Contents is attached, legible, and current.

PAGES

CONTRACT INFORMATION  
SCHEDULE OF PAY ITEMS  
CONSTRUCTION PLANS  
TRAFFIC CONTROL DEVICE REPORT  
SPECIAL PROVISIONS

PROPOSAL

TO THE  
INDIANA DEPARTMENT OF TRANSPORTATION

-----  
DATE OF LETTING: November 16, 2004

TIME OF LETTING: 10:00 AM                      EASTERN STANDARD

LOCATION OF LETTING: Auditorium, Government Center South  
402 W. Washington Street  
INDIANAPOLIS, INDIANA 46204

LOCATION OF DEPOSIT: N855 Government Center North  
100 N. Senate Avenue  
INDIANAPOLIS, INDIANA 46204  
-----

\*\*\*\*\* PROJECT IS STATE CERTIFIED \*\*\*\*\*

CONTRACT NUMBER: RS-27522-A                      PROJECT NUMBER: 1536018

STRUCTURE NUMBER:

ROUTE: US 31

LOCATION: ON US 31 FROM 0.5 MILE SOUTH OF BUSINESS 31 TO US 24

DESCRIPTION: HMA RESURFACE

FT. WAYNE DISTRICT

COUNTY : MIAMI

CONTRACT COMPLETION INFORMATION

CONTRACT COMPLETION DATE: June 30, 2005

DBE GOAL: A contract provision goal of 7 percent of the contract bid price has been established as the minimum amount for contracting to disadvantaged business enterprises.

STANDARD SPECIFICATIONS EFFECTIVE DATE 1999

SUPPLEMENTAL SPECIFICATIONS EFFECTIVE DATE 9-1-04

LIST OF APPROVED OR PREQUALIFIED MATERIALS

STANDARD DRAWINGS LISTED ON STANDARD DRAWING INDEX EFFECTIVE DATE 9-1-04  
-----

SCHEDULE OF PAY ITEMS REVISED:

LETTING DATE: November 16, 2004

CONTRACT ID: RS-27522-A

CONTRACTOR: \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
-----						
SECTION 0001 HMA RESURFACE						
-----						
0001	105-07039 FIELD OFFICE, B	6.000 MOS	.		.	
0002	106-03285 FAILED MATERIAL	1.00 DOL	1.00000		1.00	
0003	106-03289 QUALITY ASSURANCE ADJUSTMENT	1.00 DOL	1.00000		1.00	
0004	110-01001 MOBILIZATION AND DEMOBILIZATION	LUMP	LUMP		.	
0005	202-02278 CURB, CONCRETE, REMOVE	255.000 LFT	.		.	
0006	202-90277 DETECTOR HOUSING, REMOVE	7.000 EACH	.		.	
0007	301-07448 COMPACTED AGGREGATE, NO. 53, BASE	48.000 TON	.		.	
0008	303-07449 COMPACTED AGGREGATE, NO. 73	441.000 TON	.		.	
0009	304-07491 HMA PATCHING, TYPE C	1,417.000 TON	.		.	
0010	304-07492 WIDENING WITH HMA, TYPE A	112.000 TON	.		.	
-----						

## SCHEDULE OF PAY ITEMS REVISED:

LETTING DATE: November 16, 2004

CONTRACT ID: RS-27522-A

CONTRACTOR: \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0011	306-08034 MILLING, ASPHALT, 1 1/2 IN.	73,029.000 SYS	.	.	.	.
0012	306-08042 MILLING, SCARIFICATION/PROFILE	4,000.000 SYS	.	.	.	.
0013	306-08043 MILLING, TRANSITION	5,375.000 SYS	.	.	.	.
0014	401-06264 PROFILOGRAPH, HMA	LUMP	LUMP	.	.	.
0015	401-07320 QC/QA-HMA, 1, 64, SURFACE, 9.5 mm	808.000 TON	.	.	.	.
0016	401-07329 QC/QA-HMA, 4, 70, SURFACE, 9.5 mm --SMA	8,224.000 TON	.	.	.	.
0017	402-07452 HMA, TYPE C, WEDGE AND LEVEL	15.000 TON	.	.	.	.
0018	406-05520 ASPHALT FOR TACK COAT	22.000 TON	.	.	.	.
0019	507-07479 HMA PARTIAL DEPTH PATCH	271.000 TON	.	.	.	.
0020	605-06120 CURB, CONCRETE	2,500.000 LFT	.	.	.	.
0021	610-07486 HMA FOR APPROACHES, TYPE A	270.000 TON	.	.	.	.

## SCHEDULE OF PAY ITEMS REVISED:

LETTING DATE: November 16, 2004

CONTRACT ID: RS-27522-A

CONTRACTOR: \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0022	615-06527 MONUMENT, SECTION CORNER	1.000 EACH	.		.	
0023	621-06559 MULCHED SEEDING, R	540.000 SYS	.		.	
0024	720-01894 CASTING, FURNISH AND ADJUST TO GRADE	1.000 EACH	.		.	
0025	720-44000 CASTING, ADJUST TO GRADE	4.000 EACH	.		.	
0026	720-45030 INLET, E7	1.000 EACH	.		.	
0027	801-06203 TEMPORARY PAVEMENT MARKING, 4 IN.	3,465.000 LFT	.		.	
0028	801-06207 TEMPORARY PAVEMENT MARKING, REMOVABLE, 4 IN.	3,465.000 LFT	.		.	
0029	801-06640 CONSTRUCTION SIGN, A	36.000 EACH	.		.	
0030	801-06775 MAINTAINING TRAFFIC	LUMP	LUMP		.	
0031	802-05704 SIGN POST, SQUARE, 1, UNREINFORCED ANCHOR BASE	28.000 LFT	.		.	
0032	802-91122 SIGN, GROUND MOUNTED, RESET	2.000 EACH	.		.	

## SCHEDULE OF PAY ITEMS REVISED:

LETTING DATE: November 16, 2004

CONTRACT ID: RS-27522-A

CONTRACTOR: \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0033	804-04435 DELINEATOR POST, REMOVE	1.000 EACH	.		.	
0034	804-06771 DELINEATOR POST, FLEXIBLE	2.000 EACH	.		.	
0035	805-78470 SIGNAL CABLE, ROADWAY LOOP, 1C 14GA.	1,413.000 LFT	.		.	
0036	805-78785 SIGNAL DETECTOR HOUSING	5.000 EACH	.		.	
0037	805-78795 SAW CUT FOR ROADWAY LOOP AND SEALER	452.000 LFT	.		.	
0038	808-03178 PAVEMENT MESSAGE MARKINGS, PREFORMED PLASTIC, LANE ARROWS	12.000 EACH	.		.	
0039	808-03179 PAVEMENT MESSAGE MARKINGS, PREFORMED PLASTIC, WORD (ONLY)	10.000 EACH	.		.	
0040	808-03631 LINE, EPOXY, SOLID, WHITE, 4 IN.	39,188.000 LFT	.		.	
0041	808-03632 LINE, EPOXY, SOLID, YELLOW, 4 IN.	36,034.000 LFT	.		.	
0042	808-75053 LINE, PREFORMED PLASTIC, SOLID, WHITE, 8 IN.	461.000 LFT	.		.	

SCHEDULE OF PAY ITEMS REVISED:

LETTING DATE: November 16, 2004

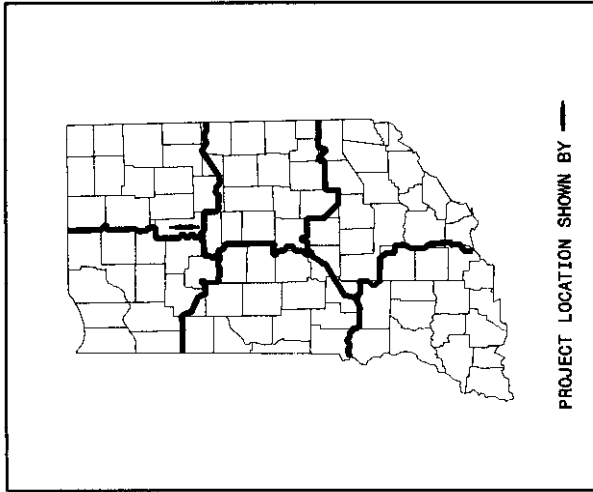
CONTRACT ID: RS-27522-A

CONTRACTOR: \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0043	808-75059 LINE, PREFORMED PLASTIC, BROKEN, WHITE, 4 IN.	8,511.000 LFT	.		.	
0044	808-75067 TRANSVERSE MARKINGS, PREFORMED PLASTIC, STOP LINE, 24 IN.	130.000 LFT	.		.	
0045	808-75996 SNOWPLOWABLE RAISED PAVEMENT MARKER, REMOVE	525.000 EACH	.		.	
0046	808-75998 SNOWPLOWABLE RAISED PAVEMENT MARKER	527.000 EACH	.		.	
0047	808-97323 LINE, THERMOPLASTIC, FOR BUZZ STRIPS, 8 IN.	576.000 LFT	.		.	
	SECTION 0001 TOTAL				.	
	TOTAL BID				.	



CONTRACT NO. RS-27522



Des. No. 0301038

**PROJECT LIMITS:**

- US 31 Resurface:  
Sta 88+07 to Sta 247+31
- Old US 24 Ramp:  
Sta 10+00 to Sta 20+88

**PAVING EXCEPTIONS:**

- Sta 198+72 to Sta 201+68
- Sta 213+20 to Sta 215+59
- Sta 245+58 to Sta 246+60

Indiana Department of Transportation  
Standard Specification dated 1999  
to be used with these plans.

# INDIANA DEPARTMENT OF TRANSPORTATION

## PROJECT DESCRIPTION

### HMA RESURFACE

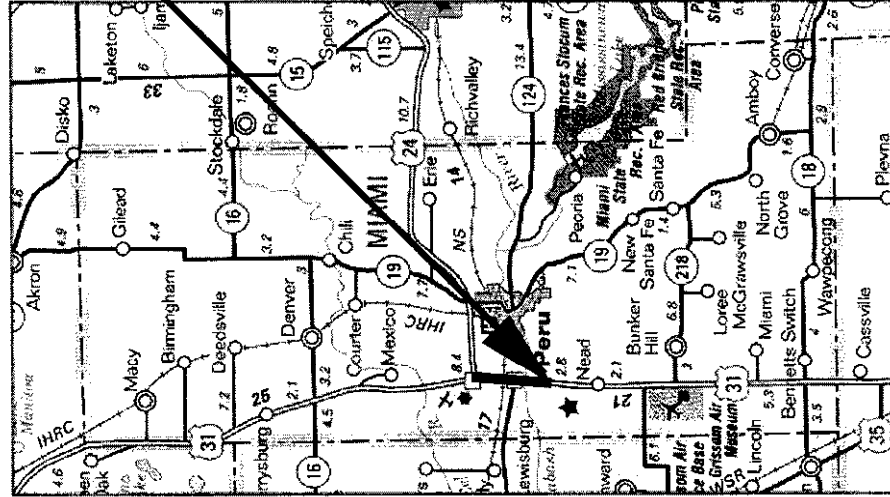
#### PROJECT LOCATION

US 31 from 0.5 miles South of Business 31 to US 24  
(RP 179+25 to RP 182+45)

Gross Length 3.22 MI.

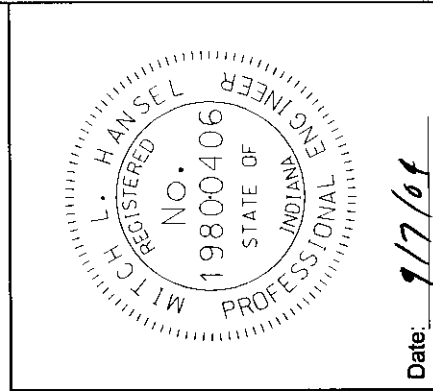
Net Length 3.10 MI.

## PROJECT



PLANS PREPARED BY:

RASIDAH ZAN



Date: 9/17/04

CERTIFIED BY:

APPROVED FOR LETTING:

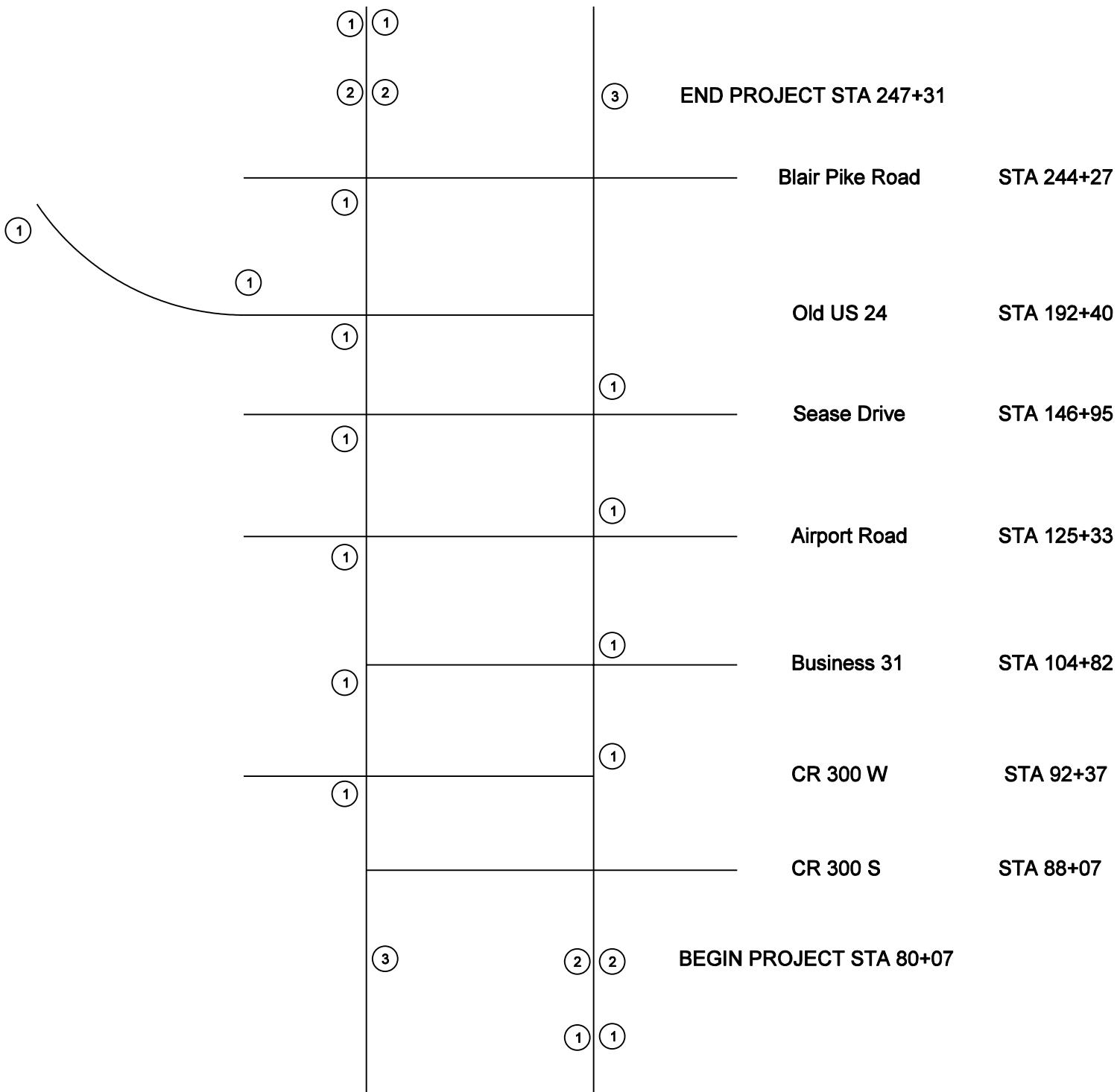
*[Handwritten Signature]*

*[Handwritten Signature]*

CONSTRUCTION PLAN INDEX

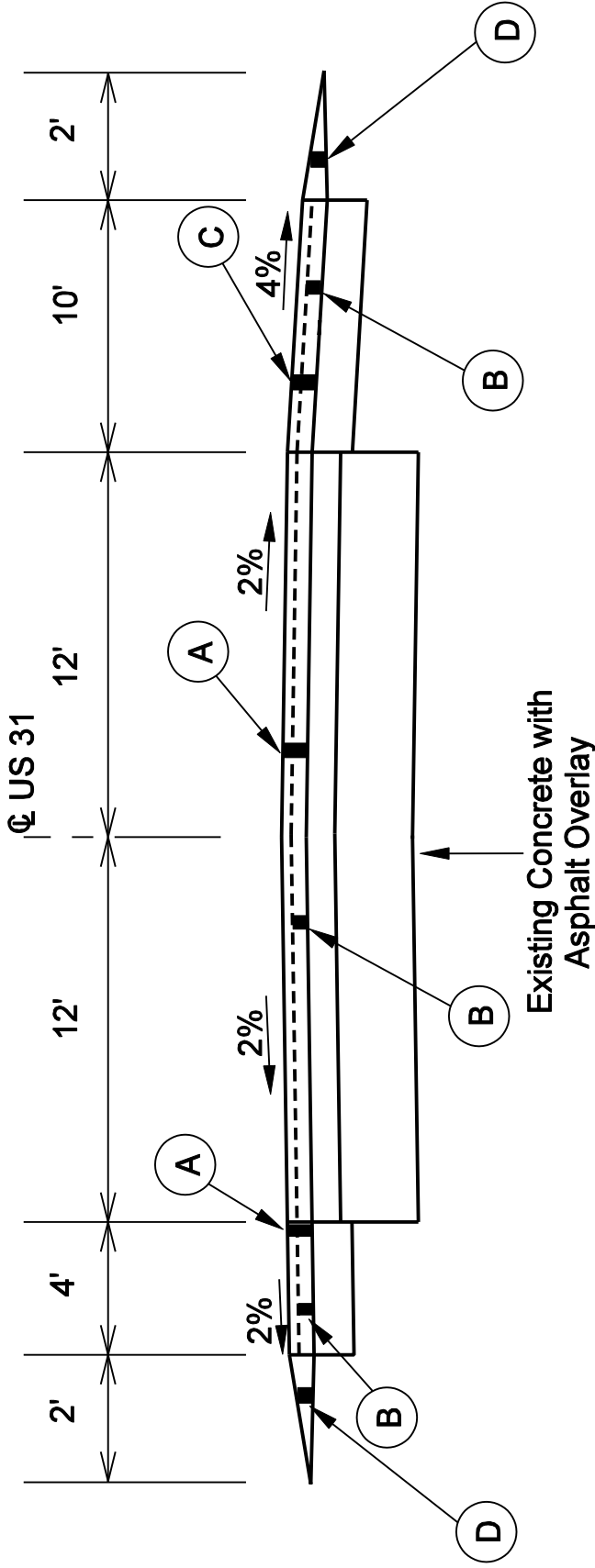
<u>Page</u>	
1	Title Sheet
2	Construction Plan Index
3	Construction Sign Layout
4 -6	Typical Section
7-28	Strip Map
29-33	Detail and Summary Sheets

# Fort Wayne District US 31 Construction Sign Layout



- Construction Sign Type "A"**
- ① Road Construction Ahead
  - ② Road Construction Next 3.2 Miles
  - ③ End Construction

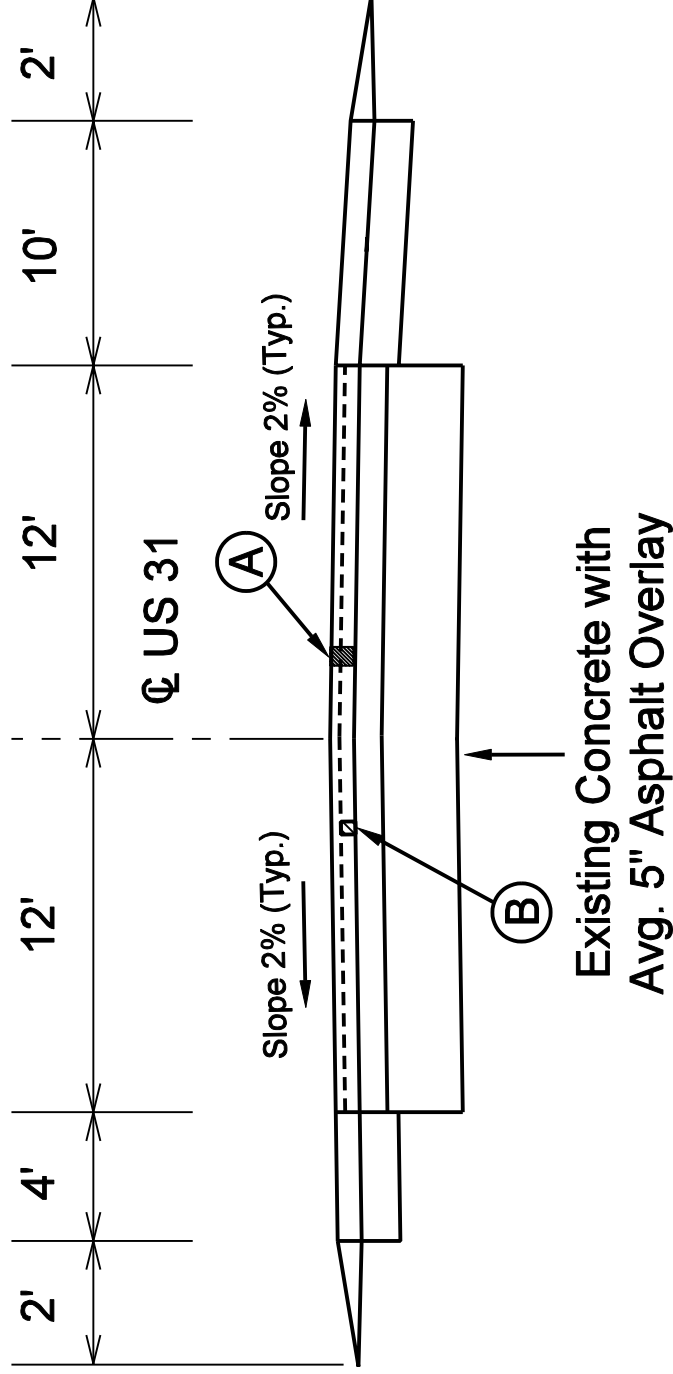
Fort Wayne District  
 US 31 - Typical Section  
 STA 80+07 to STA 125+33



- (A) Place 165 lb/sys QC/QA-SMA, 4, 70 Surface, 9.5 mm
- (B) Mill 1 1/4" Existing Surface
- (C) Place 165 lb/sys QC/QA-HMA, 1, 64 Surface, 9.5 mm
- (D) Compacted Aggregate #73 - as directed

RS-27522

Fort Wayne District  
US 31 - Typical Section  
Sta. 125+33 to Sta. 247+31



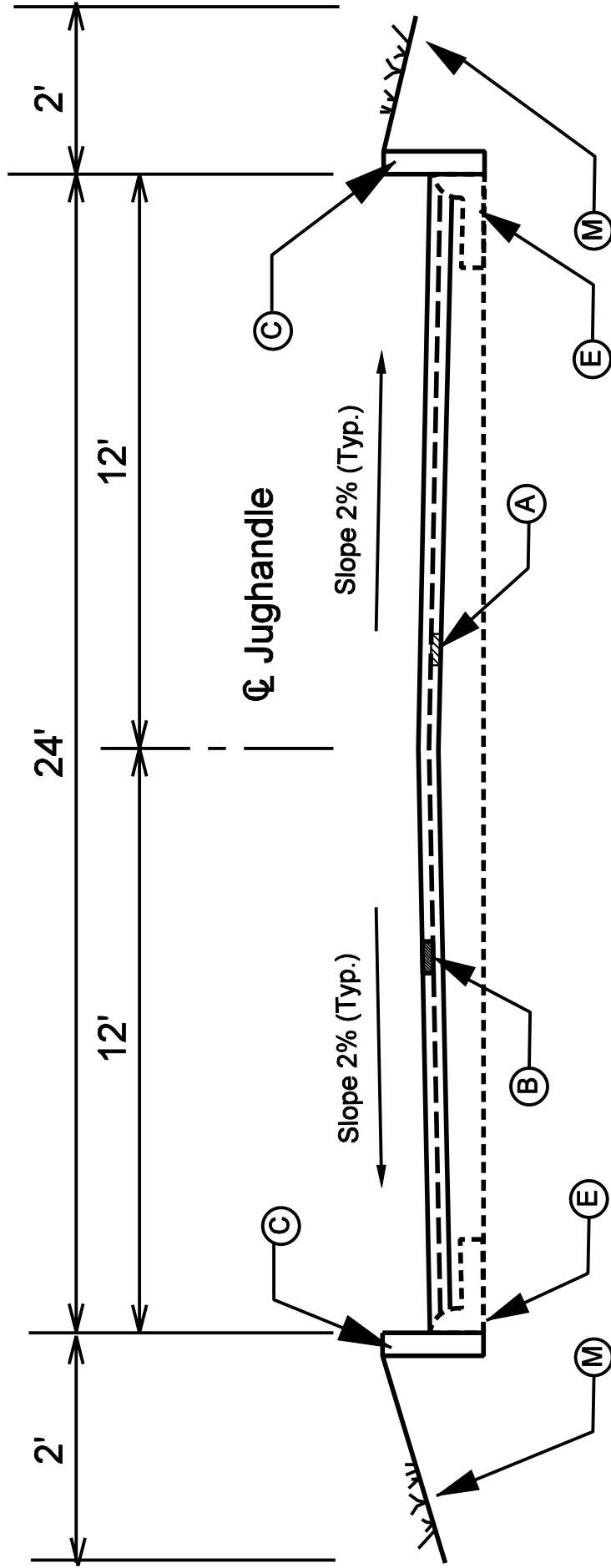
- (A) Place 165 lb/sys QC/QA-SMA, 4, 70 Surface, 9.5 mm
- (B) Mill 1 1/4" Existing Surface

Note: Median and Outside shoulder surface and corrugations to be addressed in future contract.

# Fort Wayne District US 31 (Jughandle)

## TYPICAL SECTION

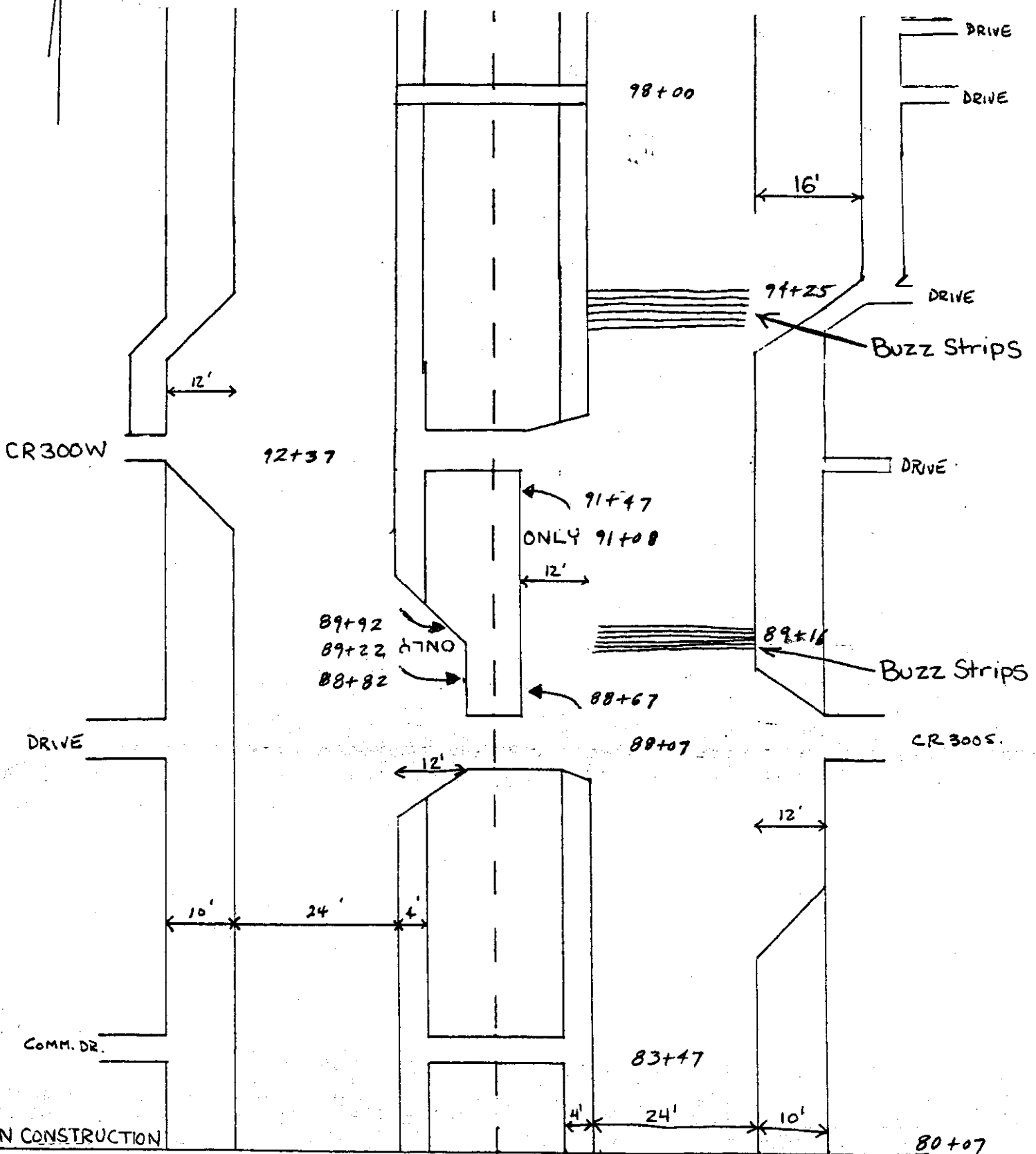
Sta. 10+00 to Sta. 20+00



- (A) Milling Scarify
- (E) Existing Integral Curb
- (B) 165 lbs/sys QC/QA SMA, 4, 70, Surface 9.5mm
- (M) Mulched Seeding
- (C) Concrete Curb

Fort Wayne District  
U.S. 31 @ Business 31  
Strip Map

RS-27522



Fort Wayne District  
US 31 (Miami County)

Strip Map

104+00

103+00

102+00

101+00

100+00

99+00



16' 37'

2

PIPE

STA 104+00

STA 103+56

STA 103+71 REPLACE  
3'x3' BEEHIVE INLET  
CASTING AND  
STRUCTURE. 2" TOP  
OF PIPE TO FRAME  
15" DIA. PIPE  
CONCRETE PIPE  
MAY BE INTEGRAL  
TO STRUCTURE

4' 12' 12' 10'

STA 102+38

148' SOLID WHITE GORE

STA 102+00

4' 16' 4'

102+00

101+00

STA 101+07 DETECTIVE HOUSING

STA 100+93 LOOPS

STA 100+90 SOLID WHITE GORE

STA 100+18 DETECTIVE HOUSING  
(OLD) CEMENTED OVER

STA 100+18 LOOPS (OLD)

100+00

10' 12' 12' 4'

4' 12' 12' 16' 4'

STA 99+44 DETECTIVE HOUSING

STA 99+44 LOOPS

START  
PROJECT  
STA 99+00



Fort Wayne District  
US 31 (Miami County)

Strip Map



109+00

108+00

107+00

106+00

105+00

STA 109+28 REPLACE  
3'x3' BEEHIVE INLET CASTING  
STA 109+24 LOOPS  
STA 109+12 DETECTOR HOUSING

STA 108+46  
STA 108+38 DETECTOR HOUSING

STA 107+18  
STA 107+12  
STA 106+92

STA 105+83

STA 105+43  
STA 105+32 DETECTOR HOUSING  
STA 105+19 STOP BAR

STA 104+82  
BUSINESS 31  
DO NOT PAVE APPROACH

STA 104+27 STOP BAR

10' 12' 12' 16'

4' 12' 12' 10'

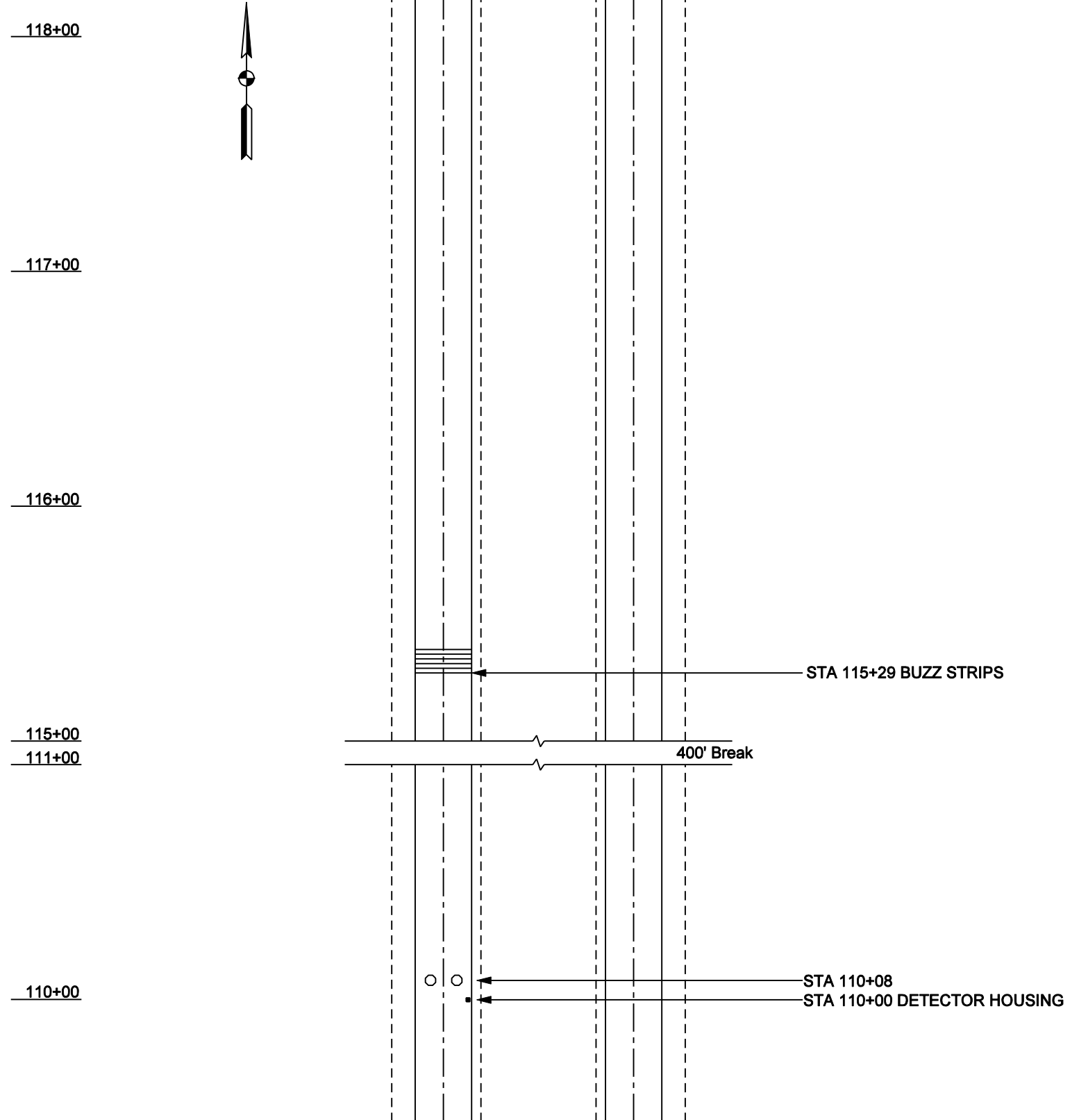
108'

9

Fort Wayne District  
US 31 (Miami County)

Strip Map

Match Line Sta. 118+62



Fort Wayne District  
US 31 (Miami County)

Strip Map

Match Line Sta. 123+96

123+00

122+00

121+00

120+00

119+00

STA 121+39

STA 121+00

STA 120+32

STA 120+29 BUZZ STRIPS

STA 119+32

12'

Match Line Sta. 118+62

Fort Wayne District  
US 31 (Miami County)

Strip Map

Match Line Sta. 129+20

129+00

Sta. 128+83

4'

Sta. 128+83

128+00

127+00

Sta. 126+77

10' 12' 12' 12' 3' 3.5'

Sta. 126+77

Sta. 126+44

126+00

Sta. 126+03

3.5' 12' 12' 10'

Sta. 125+77

Sta. 125+31  
Airport Road

Sta. 125+31  
Airport Road

125+00

16' 4' 5' 15' 12' 12' 10'

STA 124+90

STA 124+76

STA 124+36

STA 124+17 START TAPER

124+00

Match Line Sta. 123+96

Fort Wayne District  
US 31 (Miami County)

Strip Map

Match Line Sta. 134+00

5'

134+00

133+00

132+00

131+00

Sta. 130+43

8'

Sta. 130+10

6'

130+00

Sta. 129+24

Match Line Sta. 129+20

Fort Wayne District  
US 31 (Miami County)

Strip Map

Match Line Sta. 162+32  
Sta. 156+92 Existing Guardrail 1200' Break

150+00

Sta. 149+60 5'

149+00

148+00

Sta. 148+00 10' 12' 12' 12' 4.5' 4.5' 5' 12' 12' 10'

147+00

Sease Drive  
Sta. 146+95

146+00

10' 12' 12' 4' 4' 12' 12' 10'

1200' Break

Match Line Sta. 134+00

Fort Wayne District  
US 31 (Miami County)

Strip Map

Match Line Sta. 167+92

167+00

Sta. 166+84  
Existing Guardrail

19' 19'

Sta. 166+84

166+00

X-Over  
Sta. 165+80

20' 20'

Sta. 165+27

165+00

164+00

Sta. 164+00

10' 12' 12' 7' 7' 12' 12' 10'

Sta. 163+42

Gravel X-Over  
Stat. 163+27

163+00

Sta. 163+10

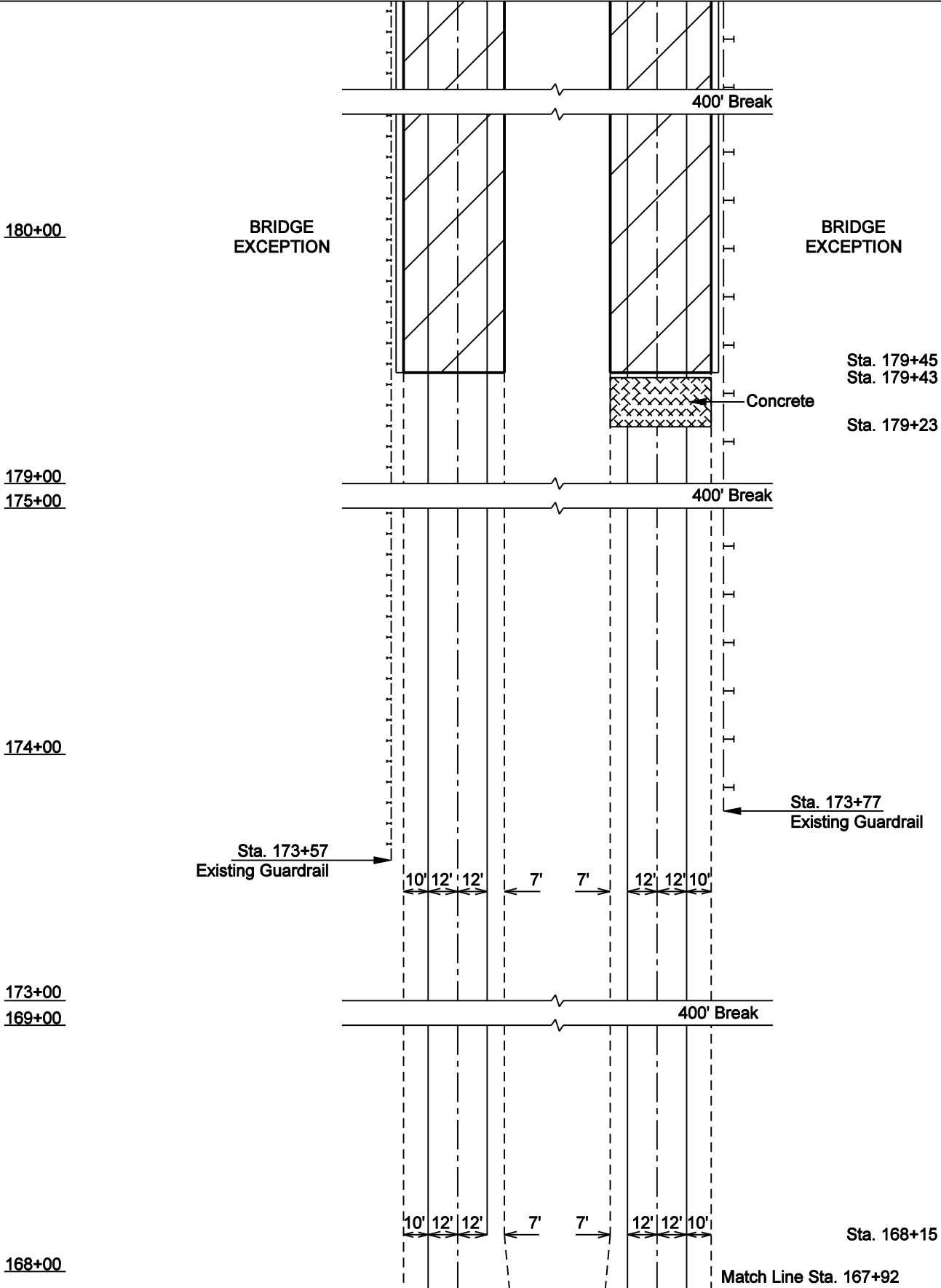
10' 12' 12' 5' 5' 12' 12' 10'

Match Line Sta. 162+32

Fort Wayne District  
US 31 (Miami County)

Strip Map

Match Line Sta. 184+96



Match Line Sta. 167+92

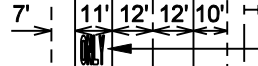


Fort Wayne District  
US 31 (Miami County)

Strip Map

Match Line Sta. 190+20

190+00

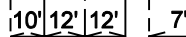


Sta. 189+93

Sta. 189+70

189+00

188+00



Sta. 188+23 Existing MH

Sta. 188+18 Existing Detector Housing

Sta. 188+12 Existing Loops

Sta. 187+90

187+00

186+00

BRIDGE  
EXCEPTION

BRIDGE  
EXCEPTION

185+00

Match Line Sta. 184+96

Fort Wayne District  
US 31 (Miami County)

Strip Map

Match Line Sta. 195+44

195+00

194+00

193+00

192+00

191+00

Sta. 192+76

SEE SHEET 27  
FOR OLD US 24  
INTERCHANGE

Sta. 192+03

Sta. 191+80 Loops  
Sta. 191+73 Detector Housing

Match Line Sta. 190+20

22'

12'

20'

27'

8'

43'

7'

12'

12'

10'

5'

7'

36'

Sta. 192+20

Sta. 191+90

Sta. 191+50

Sta. 191+41

Sta. 191+10

Match Line Sta. 190+20

Fort Wayne District  
US 31 (Miami County)

Strip Map

BRIDGE  
EXCEPTION

BRIDGE  
EXCEPTION

200+00

199+00

198+00

197+00

196+00

Sta. 198+35  
Existing Guardrail

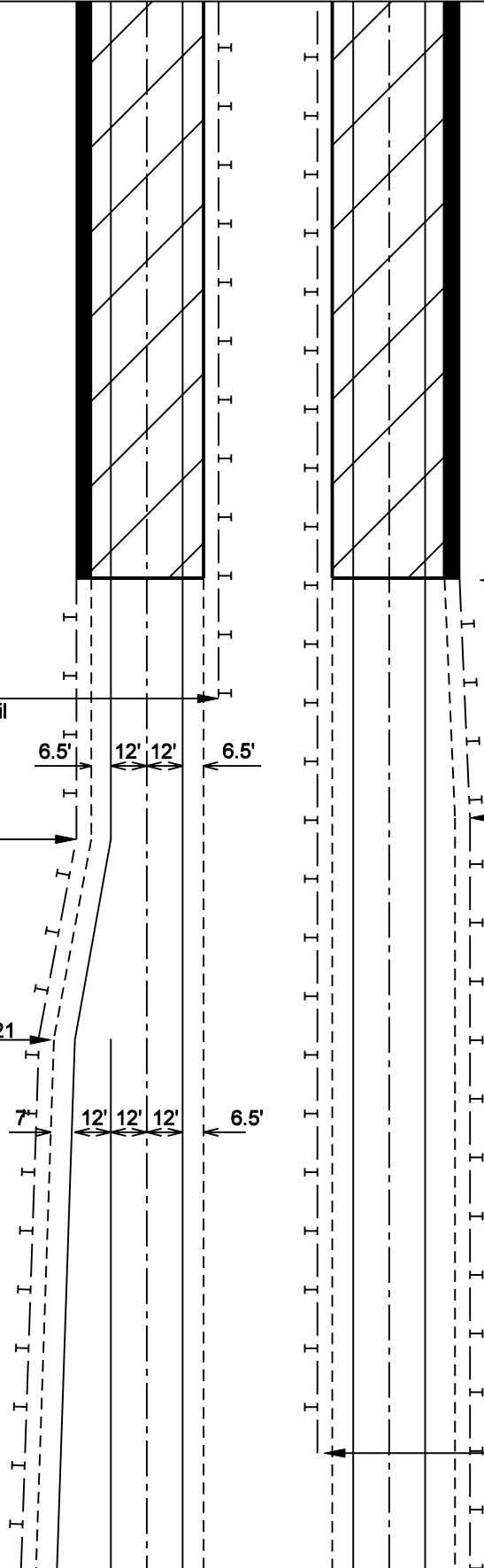
Sta. 197+88

Sta. 197+21

Sta. 198+72

Sta. 197+95

Sta. 195+83  
Existing Guardrail



Fort Wayne District  
US 31 (Miami County)

Strip Map

Match Line Sta. 205+92

205+00

Sta. 204+95

Gravel X-Over  
Sta. 204+56

Sta. 204+31

204+00

203+00

10' 12' 12' 7'

Sta. 202+18  
Existing Guardrail

202+00

Sta. 202+00

7' 12' 12' 10'

Sta. 201+68

201+00

BRIDGE  
EXCEPTION

BRIDGE  
EXCEPTION

Fort Wayne District  
US 31 (Miami County)

Strip Map

Match Line Sta. 211+16

211+00

210+00

209+00

208+00

207+00

206+00

Sta. 209+51

10' 12' 12' 7' 7' 12' 12' 10'

Match Line Sta. 205+92

Fort Wayne District  
US 31 (Miami County)

Strip Map

Match Line Sta. 216+40

216+00

Sta. 215+84

Sta. 215+59

215+00

BRIDGE EXCEPTION

214+00

Sta. 214+10

Sta. 213+69

213+00

212+00

Sta. 211+40

Match Line Sta. 211+16

Sta. 215+34  
End Existing Guardrail

Sta. 215+88  
Existing Guardrail

Sta. 215+59

Sta. 215+34

BRIDGE EXCEPTION

Sta. 213+69

Sta. 213+20

10' 12' 12' 7'

7' 12' 12' 10'

Match Line Sta. 211+16

Fort Wayne District  
US 31 (Miami County)

Strip Map

Match Line Sta. 221+63

221+00

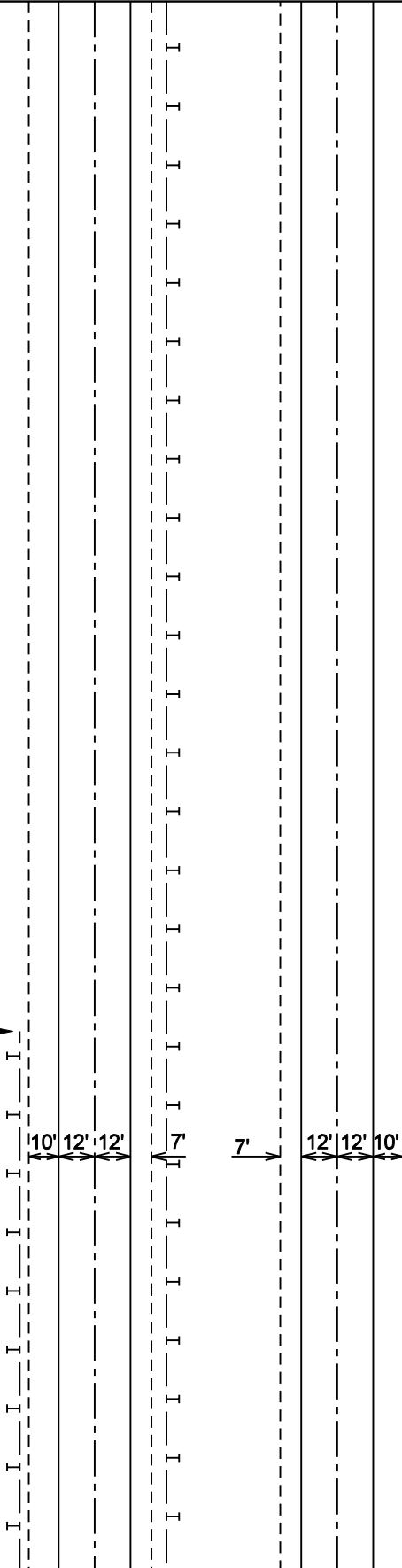
220+00

219+00

218+00

217+00

Sta. 218+20  
End Existing Guardrail →



Match Line Sta. 216+40

Fort Wayne District  
US 31 (Miami County)

Strip Map

Match Line Sta. 226+87

226+00

225+00

224+00

223+00

222+00

Sta. 226+70

Sta. 224+95

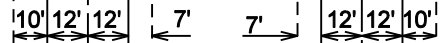
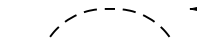
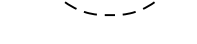
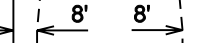
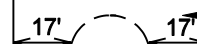
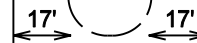
Sta. 223+78

Sta. 223+39

Sta. 223+00

Sta. 220+35  
End Existing Guardrail

Gravel X-Over  
Sta. 223+19



Match Line Sta. 221+63



Fort Wayne District  
US 31 (Miami County)

Strip Map

Match Line Sta. 237+01

237+00

236+00

235+00

234+00

229+00

228+00

227+00

10' 12' 12' 5' 5' 12' 12' 10'

Sta. 235+39

Gravel X-Over  
Sta. 234+09

Sta. 234+87

10' 12' 12' 5' 5' 12' 12' 10'

500' Break

Sta. 228+17

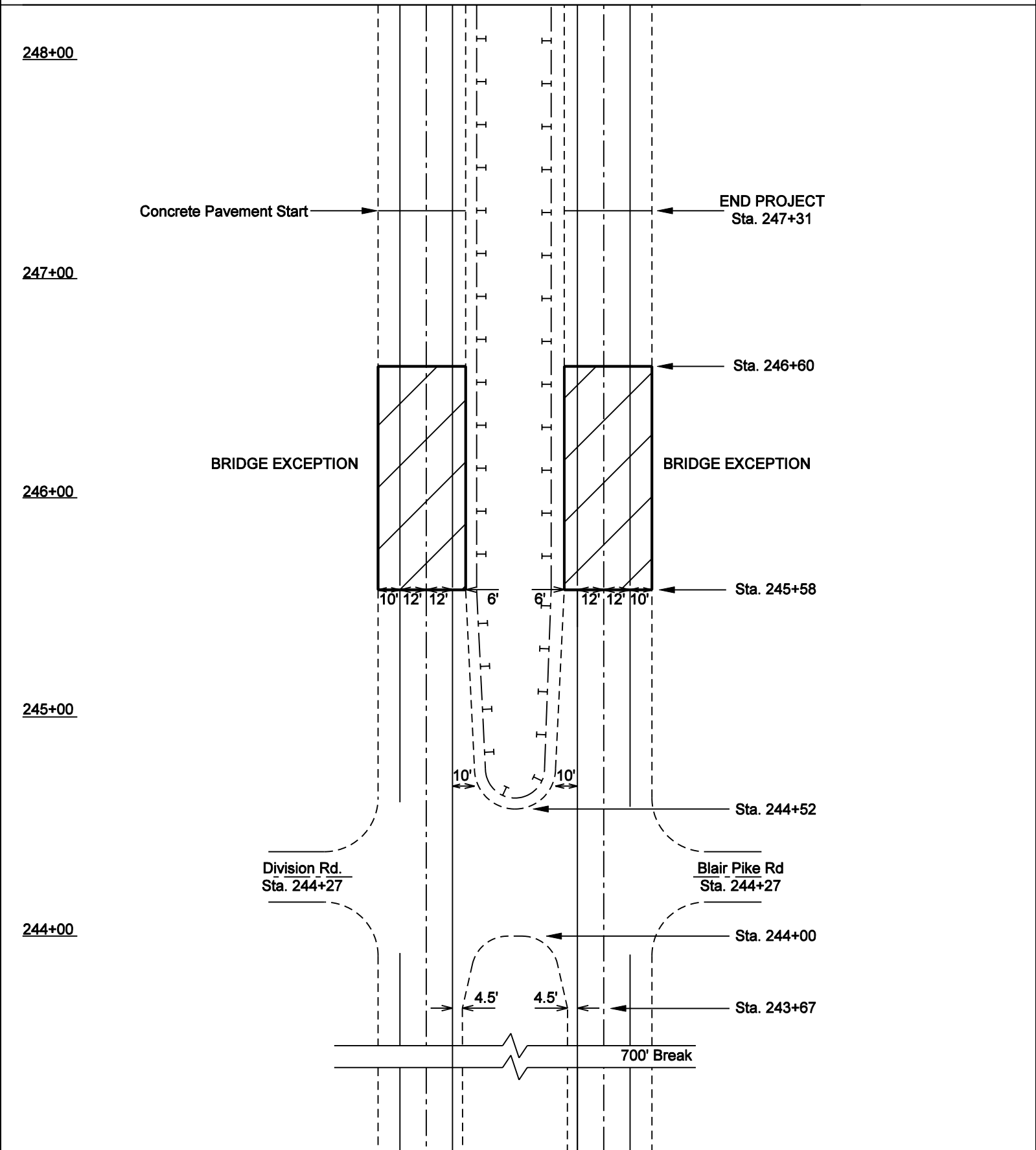
10' 12' 12' 6' 7' 6' 7' 12' 12' 10'

Match Line Sta. 226+87

Match Line Sta. 226+87

Fort Wayne District  
US 31 (Miami County)

Strip Map

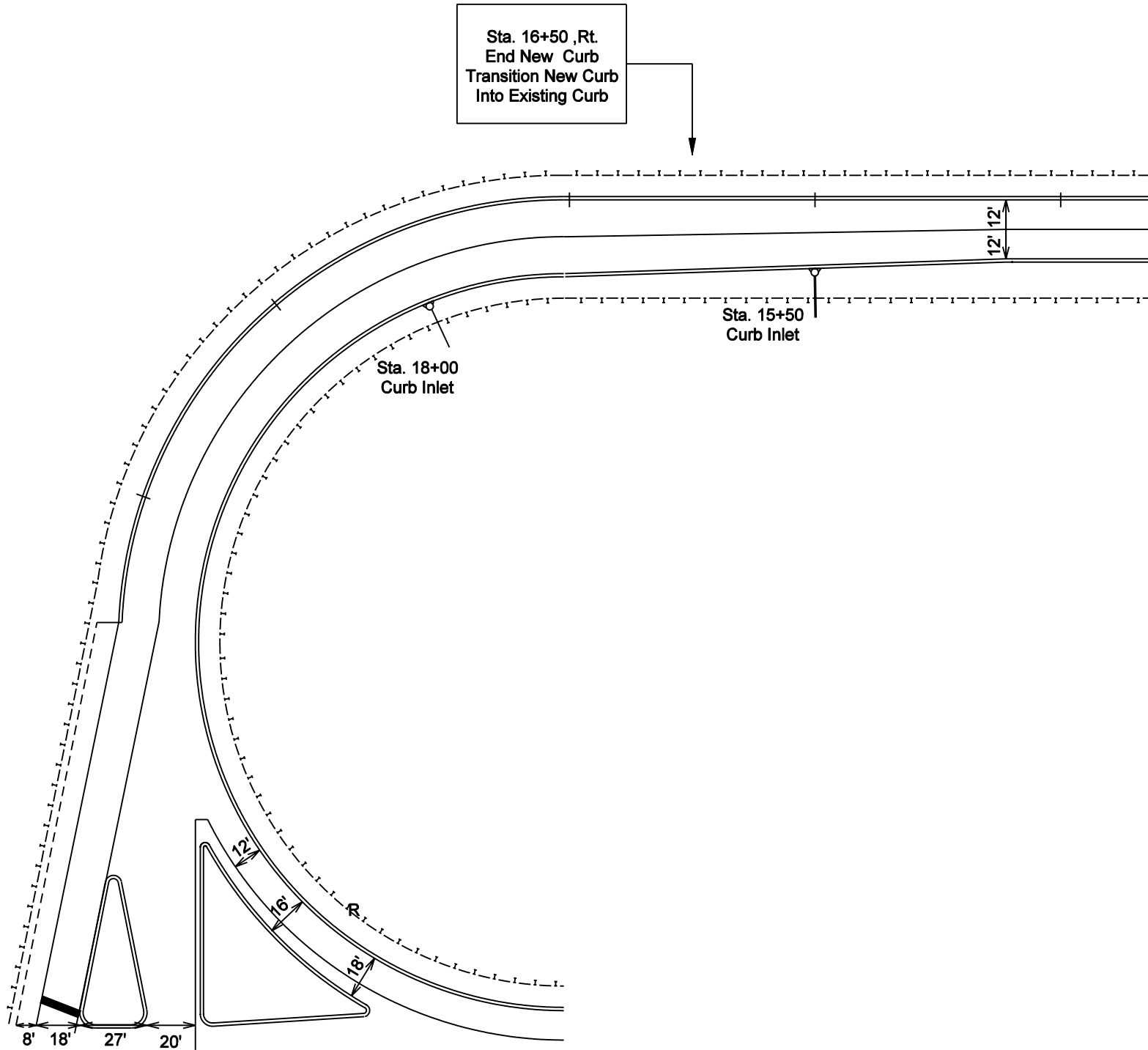


Match Line Sta. 237+01

...0301038\_US31\map\Strip Map.dgn

# Fort Wayne District U.S. 31 Old US 24 Interchange

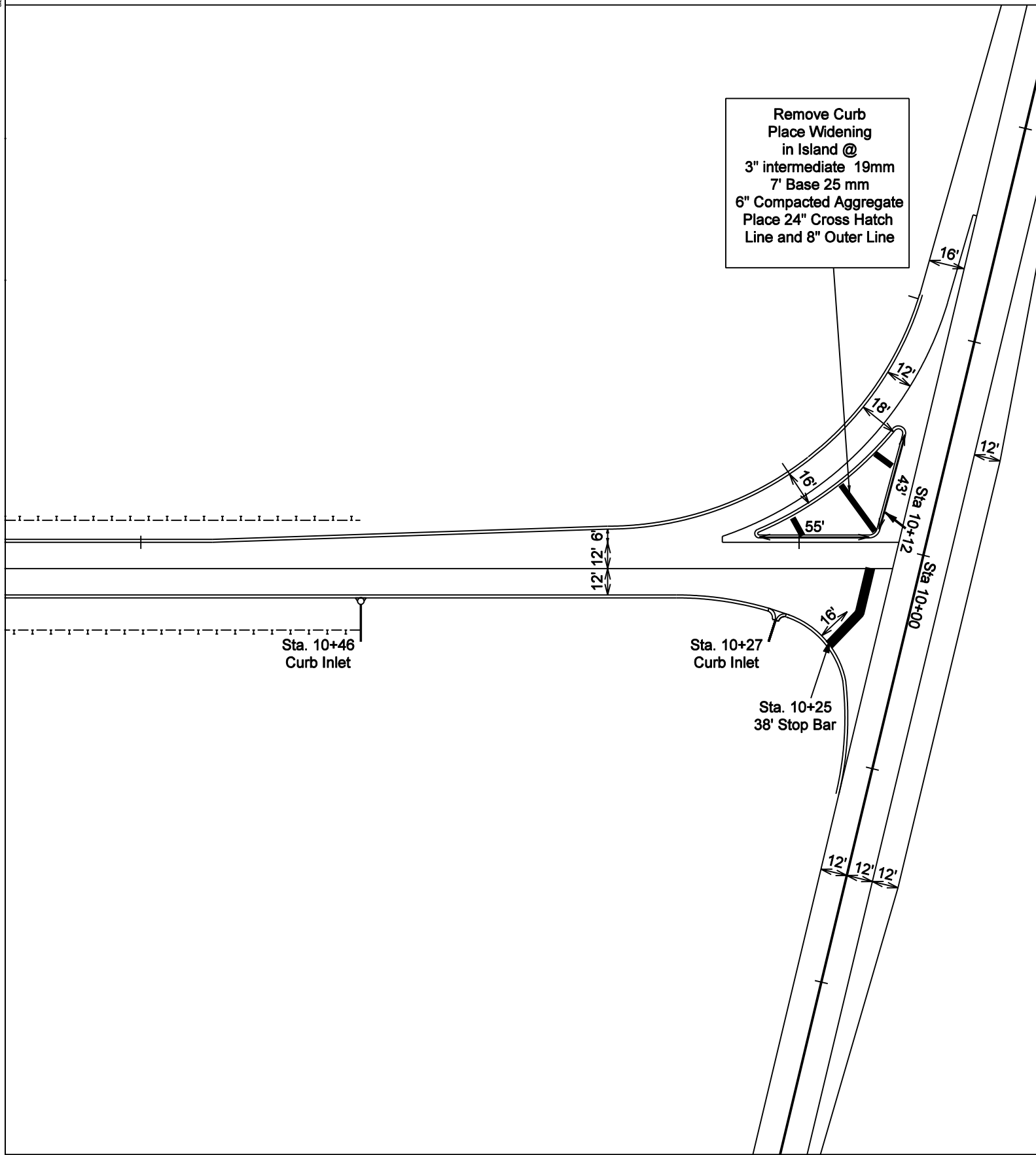
RS-27522



...:\0301038\_US31\map\Strip Map.dgn

# Fort Wayne District U.S. 31 Old US 24 Interchange

RS-27522

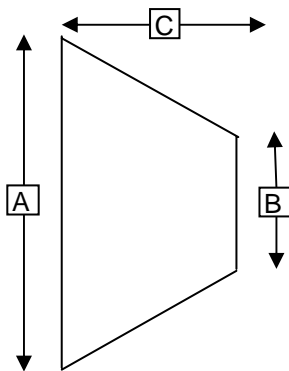


### Public Road Approaches

STATION	NAME	A (FT)	B (FT)	C (FT)	AREA (SYS)
83+47	Comm. Drive Crossover	70	35	50	291.67
88+07 RT	CR 300 S	75	18	90	465.00
88+07	CR 300 S Crossover	90	50	30	233.33
92+37 LT	CR 300 W	25	25	55	152.78
92+37	CR 300 W Crossover	100	60	38	337.78
98+00	Private Drive Crossover	50	45	50	263.89
104+82	Business 31 Crossover	108	69	37	363.83
192+66	Jughandle to Bus. US 24	164	88	24	336.00
<b>Total Area:</b>					<b>2444.28</b>

PLACE: 165 lbs/sys HMA for Approaches, Type A

<b>QUANTITIES:</b>	<b>202 Tons</b> HMA for Approaches, Type A
--------------------	--



### Public Road Approach Radius Widening

Station	Name	Radius Location	Width (feet)	Remove Concrete Curb (feet)
104+82	Business 31 Crossover	North	7	50
104+82	Business 31 Crossover	South	7	40

PLACE: 165 lbs/sys HMA for Approaches, Type A over 990 lbs/sys HMA for Widening, Type A

<b>QUANTITIES:</b>	<b>6 Tons</b> HMA for Approaches, Type A <b>35 Tons</b> HMA for Widening, Type A
--------------------	---

## Minor Approaches

### Mailbox Approaches

	Quantity	Area/each (sys)	Total Area (sys)
Ingress - Improved	4	137	548
Regular - Improved	1	103	103

### Driveway Approaches

	Quantity	Length (ft)	Total Area (sys)
Commercial Drives - Improved	2	100	67

**Total Areas:**  
**Improved: 718 sys**

\*\*NOTE: See Public Road Approach Table for Crossover Areas\*\*

<b>QUANTITIES:</b>
--------------------

<b>60 Tons</b> HMA for Approaches, Type A (1.5" Surface)
--

### Northbound Turn Lanes

Start Sta.	End Sta.	Description	Length (ft)	Width (ft)	Area (sys)	Side
85+17	86+17	CR 300 S	100	12/2	66.67	RIGHT
86+17	88+37	CR 300 S	220	12	293.33	RIGHT
88+37	89+37	CR 300 S	100	10/2	55.56	RIGHT
87+82	92+67	CR 300 W	485	12	646.67	LEFT
92+67	92+82	CR 300 W	15	12/2	10.00	LEFT
93+97	94+97	Business 31	100	16/2	88.89	RIGHT
94+97	102+38	Business 31	741	16	1317.33	RIGHT
119+32	120+32	Airport Road	100	12/2	66.67	LEFT
120+32	124+90	Airport Road	458	12	610.67	LEFT
124+90	125+00	Airport Road	10	12/15	15.00	LEFT

### Southbound Turn Lanes

Start Sta.	End Sta.	Description	Length (ft)	Width (ft)	Area (sys)	Side
86+87	87+57	CR 300 S	70	12/2	46.67	RIGHT
87+57	89+47	CR 300 S	190	12	253.33	RIGHT
89+47	90+47	CR 300 S	100	12/2	66.67	RIGHT
91+17	92+27	CR 300 W	110	12/2	73.33	LEFT
92+27	93+67	CR 300 W	140	12	186.67	LEFT
93+67	94+67	CR 300 W	100	12/2	66.67	LEFT
103+56	104+00	Business 31	44	12/2	29.33	RIGHT
104+00	107+18	Business 31	318	12	424.00	RIGHT
107+18	108+48	Business 31	130	12/2	85.33	RIGHT
124+17	125+00	Airport Road	83	16/2	73.78	RIGHT

### Patching Locations

Start Sta.	End Sta.	NB Lane	Length (ft)	Width (ft)	Area (sys)	Depth
80+33	80+58	Drive Right Wheel	25	4	11.11	Partial
80+46	81+07	Drive Left Wheel	61	4	27.11	Partial
80+77	81+07	Drive Right Wheel	30	5	16.67	Partial
82+01	82+07	Drive Right Wheel	6	5	3.33	Partial
84+28	84+38	Drive	10	5	5.56	Partial
84+62	84+72	Drive	10	12	13.33	Full
85+05	85+37	Drive	32	5	17.78	Partial
87+34	87+54	Drive	20	5	11.11	Partial
87+64	89+16	Drive	152	3	50.67	Partial
86+47	89+55	Drive	308	12	410.67	Full
89+63	89+68	Drive	5	5	2.78	Partial
89+78	89+86	Drive	8	12	10.67	Partial
99+37	99+54	Ramp	17	3	5.67	Full
99+54	99+90	Ramp	36	4	16.00	Full
99+80	100+10	Ramp Shoulder	30	4	13.33	Full
100+50	102+50	Outside Edgeline	200	3	66.67	Partial
106+90	108+50	Outside Shoulder	160	5	88.89	Full

### Joint Patching Locations

Direction	Quantity (each)	Length (ft)	Width (ft)	Area (sys)	Depth
Northbound Lanes	10	6	24	160.00	Full
Southbound Lanes	15	6	24	240.00	Full

#### FULL DEPTH PATCHING

Total Distributed Patching: 1373 sys  
 Total Undistributed Patching: 136 sys  
 Total Patching: 1509 sys

#### PARTIAL DEPTH PATCHING

Total Distributed Patching: 224 sys  
 Total Undistributed Patching: 23 sys  
 Total Patching: 247 sys

Full Depth Patching: 1650 lb/sys HMA Patching, Type C

Partial Depth Patching: 550 lb/sys HMA Partial Depth Patch, Type C

Note: Patching locations are subject to project supervisor's review and additional locations may be added.

\*\*Cost of asphalt milling, concrete sawing, and concrete removal for patching operations included in the HMA Patching item\*\*

<b>QUANTITIES:</b>	<b>1245 Tons</b> HMA Patching, Type C <b>68 Tons</b> HMA Partial Depth Patch, Type C
--------------------	---



**Fort Wayne District**

US 31

HMA Resurface

Patching

Start Station	End Station	Lane	Length (ft)	Width (ft)	Area (sys)	Depth (in)
240+27	240+30	SB	3	2	1	5
240+37	240+40	SB	3	2	1	5
240+48	240+51	SB	3	2	1	5
240+59	240+63	SB	4	2	1	5
240+70	240+73	SB	3	2	1	5
240+80	240+84	SB	4	2	1	5
240+91	240+93	SB	2	3	1	5
241+01	241+04	SB	3	2	1	5
241+11	241+14	SB	3	2	1	5
241+23	241+26	SB	3	2	1	5
241+33	241+36	SB	3	2	1	5
241+44	241+47	SB	3	2	1	5
241+55	241+57	SB	2	3	1	5
241+64	241+71	SB	7	10	8	5
241+76	241+78	SB	2	4	1	5
241+86	241+89	SB	3	3	1	5
241+96	241+99	SB	3	3	1	5
242+01	242+41	SB	40	3	13	5
242+57	244+04	SB	147	4	65	5
242+40	243+47	SB	107	2	24	5
243+79	243+88	SB	9	2	2	5
<b>Total</b>					<b>124</b>	

Total Distributed Patching 124 sys

Total Undistributed Patching 122sys

---

246 sys

---

**Fort Wayne District**

US 31 Jughandle

HMA Resurface

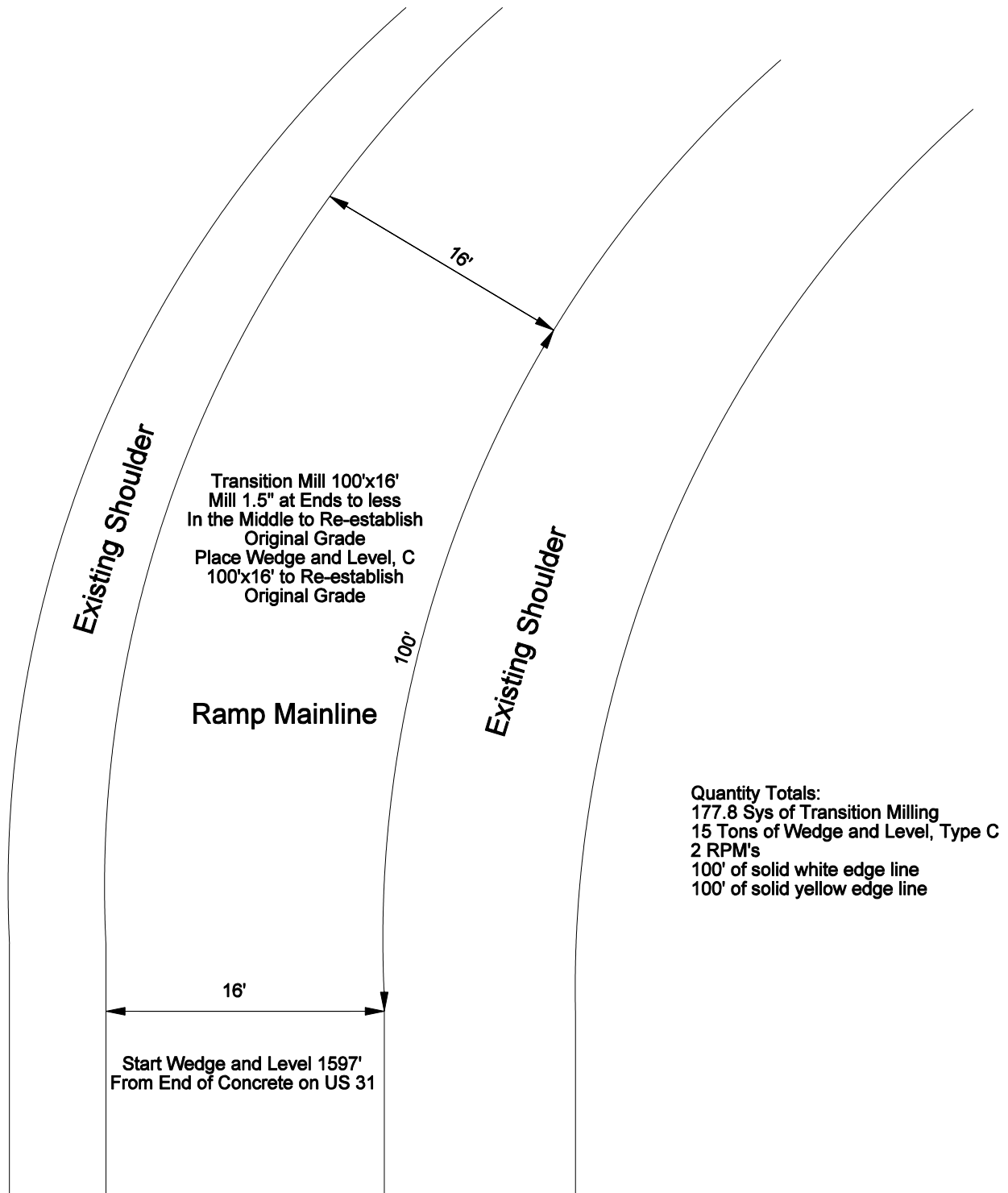
Patching

Start Station	End Station	Lane	Length (ft)	Width (ft)	Area (sys)	Depth (in)	
10+14	10+26	LT	12	4	5	15	
10+35	10+40	LT	5	4	2	15	
10+55	10+58	LT	3	7	2	15	
10+63	10+68	LT/RT	5	24	13	15	
10+76	11+10	LT	34	5	19	15	
11+10	11+22	LT	12	6	8	15	
11+29	11+34	LT/RT	5	24	13	15	
11+41	11+48	LT	7	12	9	15	
11+73	11+78	LT	5	24	13	15	
11+78	12+08	LT	30	3	10	15	
12+20	12+27	LT/RT	7	24	19	15	
12+99	13+02	LT/RT	3	24	8	15	
13+56	13+57	LT/RT	1	24	3	15	
13+81	13+85	LT/RT	4	24	11	15	
14+17	14+20	LT/RT	3	24	8	15	
14+53	14+57	LT/RT	4	24	11	15	
15+35	15+39	LT/RT	4	24	11	15	
15+75	15+80	LT/RT	5	24	13	15	
16+17	16+20	LT/RT	3	24	8	15	
16+59	16+62	LT/RT	3	24	8	15	
16+98	17+01	LT	3	12	4	15	
17+36	17+39	LT	3	12	4	15	
17+73	17+78	LT/RT	5	24	13	15	
18+12	18+15	LT	3	12	4	15	
18+49	18+53	LT	4	12	5	15	
18+85	18+90	LT	5	12	7	15	
<b>Total</b>					<b>203</b>		

Total Distributed Patching

203 sys**Quantities:****167 Tons** HMA Patching, Type C

Fort Wayne District  
US 31 (Miami County)  
NEW US 24 NE Ramp Detail  
Strip Map





SPECIAL PROVISIONS  
TABLE OF CONTENTS

PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION ..... 1

FHWA-1273 ..... 1

DISADVANTAGED BUSINESS ENTERPRISE PROCEDURE  
AND GOOD FAITH EFFORTS ..... 13

EXECUTIVE ORDER 11246 ..... 20

MUTCD ..... 30

HOLIDAYS ..... 30

ENGINEER APPLICATION PERSONAL COMPUTER ..... 30

FAX MACHINE IN FIELD OFFICE ..... 33

CONSTRUCTION ENGINEERING ..... 33

BASIS FOR USE OF APPROVED OR PREQUALIFIED MATERIALS ..... 34

EQUAL EMPLOYMENT OPPORTUNITY TRAINEES ..... 35

TRAFFIC CONTROL DEVICE REPORT ..... 35

STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES,  
ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS ..... 35

FAILURE TO COMPLETE ON TIME FOR CALENDAR COMPLETION DATE ..... 36

DETERMINATION AND EXTENSION OF CONTRACT ..... 36

STOCKPILED MATERIALS ..... 37

DEMOLITION/RENOVATION NOTIFICATION TO IDEM ..... 37

HMA REVISIONS FOR 2005 ..... 39

PATCHING ..... 58

CEMENTS ..... 58

DRAINAGE STRUCTURES ..... 59

MONUMENT, SECTION CORNER ..... 59

CERTIFICATION OF TEMPORARY TRAFFIC CONTROL DEVICES ..... 60

MAINTAINING TRAFFIC FOR MAINTENANCE OR RESURFACE WORK ..... 61

TREATMENT OF SIGNAL DETECTOR HOUSINGS ..... 61

TRAFFIC VEHICLE DETECTION LOOP SHAPE ..... 61

DOCUMENTATION, REMOVAL, AND REINSTALLATION  
OF EXISTING PAVEMENT MARKINGS ..... 62

DURABLE PAVEMENT MARKING MATERIAL FOR  
EXPOXY LONGITUDINAL AND TRANSVERSE MARKINGS ..... 62

PREFORMED PLASTIC PAVEMENT MARKINGS ..... 63

SNOWPLOWABLE RAISED PAVEMENT MARKERS ..... 64

REMOVAL OF SNOWPLOWABLE RAISED PAVEMENT MARKERS ..... 64

AGGREGATES ..... 65

ADMIXTURES FOR USE IN CONCRETE ..... 70

REFLECTIVE LENSES FOR SNOWPLOWABLE RAISED PAVEMENT MARKERS ..... 71

REFLECTIVE SHEETING ..... 72

UTILITY COORDINATION CERTIFICATION..... 74

Fort Wayne District

PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION  
(DAVIS-BACON ACT)  
General Decision Number IN030006

Modification Number 4 of General Decision Number IN030006 with a publication date of September 17, 2004 shall apply to this contract.

The above referenced wage determination is available at the Department's Contracts and Construction Division website location: <http://www.state.in.us/dot/div/contracts/letting/index.html>.

Hard copies of the wage determination will be mailed to those Contractors requesting such by calling 1-317-232-5070 or by faxing their request to 1-317-232-0676. They may also be obtained in Room 855, Indiana Government Center North, 100 North Senate Avenue, Indianapolis, IN.

If the wage determination is updated prior to 10 calendar days before the bid opening date, an addendum will be issued.

---

---

FHWA-1273

**REQUIRED CONTRACT PROVISIONS  
FEDERAL-AID CONSTRUCTION CONTRACTS**

	Page
I. General.....	
II. Nondiscrimination.....	
III. Nonsegregated Facilities .....	
IV. Payment of Predetermined Minimum Wage.....	
V. Statements and Payrolls.....	
VI. Record of Materials, Supplies, and Labor.....	
VII. Subletting or Assigning the Contract.....	
VIII. Safety: Accident Prevention.....	
IX. False Statements Concerning Highway Projects .....	
X. Implementation of Clean Air Act and Federal Water Pollution Control Act.....	
XI. Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion.....	
XII. Certification Regarding Use of Contract Funds for Lobbying.....	

ATTACHMENTS

A. Employment Preference for Appalachian Contracts  
(included in Appalachian contracts only)

**I. GENERAL**

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2;  
Section IV, paragraphs 1, 2, 3, 4, and 7;  
Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

6. **Selection of Labor:** During the performance of this contract, the contractor shall not:

a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or

b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

## II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training."

2. **EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. **Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer". All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.



a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

**6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse

that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

**8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

**9. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

### III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

### IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

#### 1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be

computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

## **2. Classification:**

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

## **3. Payment of Fringe Benefits:**

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

## **4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:**

## a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

## b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

## c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under an approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

**5. Apprentices and Trainees (Programs of the U.S. DOT):**

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

**6. Withholding:**

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

**7. Overtime Requirements:**

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

**8. Violation:**

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

**9. Withholding for Unpaid Wages and Liquidated Damages:**

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

**V. STATEMENTS AND PAYROLLS**

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

**1. Compliance with Copeland Regulations (29 CFR 3):**

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

**2. Payrolls and Payroll Records:**

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

## **VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR**

1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:

a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.

b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.

c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

## **VII. SUBLETTING OR ASSIGNING THE CONTRACT**

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).

a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

#### **VIII. SAFETY: ACCIDENT PREVENTION**

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

#### **IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

##### **NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS**

18 U.S.C. 1020 reads as follows:

*"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or*

*Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or*

*Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;*

*Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both."*

#### **X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT**

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more.)

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 *et seq.*, as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 *et seq.*, as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

**XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

**1. Instructions for Certification - Primary Covered Transactions:**

(Applicable to all Federal-aid contracts - 49 CFR 29)

a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.



j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

\* \* \* \* \*

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions**

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and

d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \* \*

**2. Instructions for Certification - Lower Tier Covered Transactions:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \* \*

**XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT PREFERENCE FOR APPALACHIAN CONTRACTS**

(Applicable to Appalachian contracts only.)

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph 1c shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph 4 below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which he estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, he shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within 1 week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph 1c above.

5. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

---

---

DISADVANTAGED BUSINESS ENTERPRISE PROCEDURE AND GOOD FAITH EFFORTS

The Standard Specifications are revised as follows:

SECTION 101, AFTER LINE 126, INSERT AS FOLLOWS:

***101.06.1 Business Day.*** Any Monday through Friday, exclusive of holidays.

SECTION 103, BEGIN LINE 1, DELETE AND INSERT AS FOLLOWS:

**SECTION 103 -- AWARD AND EXECUTION OF CONTRACT**

**103.01 Disadvantaged Business Enterprise Program.** This requirement will apply only to a federal aid contract.

**(a) General Requirements.** Failure to carry out the requirements set forth in 49 CFR ~~23.43(a)~~ 26, as outlined in the Department's DBE Program Manual, shall constitute a breach of contract and, after notification, may result in termination of the contract or such remedy as the State deems appropriate.

The above referenced CFR section requires the following policy and disadvantaged business enterprise obligation to be included in all subsequent agreements between the Contractor and all subcontractors as follows:

1. It will be the policy of the Department ~~that disadvantaged business enterprises, as defined in 49 CFR Part 23, shall have the maximum opportunity to participate in the performance of contract work financed in whole or in part with Federal funds provided under this contract~~ to create a level playing field on which DBE's can compete fairly for federally funded contracts. Consequently, the disadvantaged business enterprise requirements of 49 CFR Part ~~23~~ 26, as outlined in the Department's DBE Program Manual, apply to this contract.
2. ~~The Contractor agrees to ensure that disadvantaged business enterprises certified by the State shall have the maximum opportunity to participate in the performance of contract work or subcontract work financed in whole or in part with Federal funds provided under this contract. In this regard, the Contractor shall take all necessary and reasonable steps, in accordance with 49 CFR Part 23, to ensure that~~

~~disadvantaged business enterprises have the maximum opportunity to compete for and perform work in this contract.~~ The Contractor shall not discriminate on the basis of race, color, national origin, or sex, in the award and performance of this contract. *The Contractor shall carry out the applicable DBE requirements in the award and administration of federally funded contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract which may result in the termination of this contract or such other remedy as the Department deems appropriate. The Contractor shall include language prohibiting discrimination on the basis of race, color, national origin, or sex in the performance of this contract in all subcontracts.*

SECTION 103, BEGIN LINE 55, DELETE AND INSERT AS FOLLOWS:

**4. Certified DBE.** A business enterprise which has completed and filed a request for certification with the Indiana Department of Administration, and that the business enterprise has been reviewed and determined to comply with the guidelines established in 49 CFR Part 23 26. Business enterprises which are determined to be eligible will be certified as DBEs *and will be certified to perform specific types of work.*

**(c) Goal.** A contract provision goal may be shown on the Proposal sheet. Such goal, if required, has been established as the *desired minimum* amount to be contracted to DBEs. The Contractor shall meet or exceed the goal, or demonstrate that it could not be met despite ~~best~~ *good faith* efforts. Achievement of the contract provision goal does not relieve the Contractor of the requirement for affirmative action on subsequent subcontracting on this contract. Only work with listed DBEs ~~which~~ *that* are certified prior to the date of the letting will count toward the goal. *Credit towards contract goals will be given only for work performed by certified DBEs in the work areas for which they have been certified. The same requirements with respect to obtaining the goal apply for a Contractor that is certified as a DBE. A DBE Contractor must either achieve the goal utilizing other DBE firms or demonstrate that the goal could not be met despite good faith efforts.*

Contracting may be in the form of subcontract, lease agreement or material supply. Full credit will be given for subcontracts and lease agreements. Credit for utilization of a DBE material supplier will be limited to those DBEs certified as suppliers prior to the letting at the rate of 60% of the expenditure to the supplier unless the supplier is also the manufacturer. Suppliers that do not manufacture the items shall also perform a commercially useful function in order for credit to be received.

*A written request for changes in utilization of DBEs listed in the Affirmative Action Certification shall be approved prior to start of listed services or purchase of listed materials. Requests to reduce or eliminate the services or material provided by a listed DBE that include written approval by the DBE will be considered sufficient justification if the committed DBE utilization after the requested change will meet or exceed the contract goal or a lesser percentage approved prior to execution of the contract. If the committed DBE utilization after the change does not meet or exceed the*

*contract goal or a lesser percentage approved prior to execution of the contract, or the listed DBE does not approve the change, the Contractor shall submit documented evidence that the DBE is unable to perform successfully. Disposition of the request for change will be determined on the basis of the affirmative actions taken as required herein.*

*When a DBE firm is removed from eligibility, the Contractor shall take the following steps:*

- 1. If a subcontract has not yet been executed, the Contractor shall not count work performed by the firm toward the contract goal. The Contractor will be directed to meet the contract goal with an eligible DBE firm or demonstrate that it has made a good faith effort to do so.*
- 2. If a subcontract has been executed before the firm has been declared ineligible, the Contractor shall continue to count work performed by the firm toward the contract goal.*

SECTION 103, BEGIN LINE 87, DELETE AND INSERT AS FOLLOWS:

DBE joint ventures type A do not require DBE joint venture certification. DBE joint ventures type B do require DBE joint venture certification. A request for DBE joint venture type B certification shall be submitted not later than 9:00 a.m. local time the last ~~work~~ *business* day before the letting and shall be approved prior to bidding in order to receive credit toward the DBE goal. The DBE shall be certified with the *Indiana Department of Administration* prior to requesting DBE joint venture certification. The work for the DBE shall be identified, performed, managed, and supervised by its forces.

SECTION 103, DELETE LINES 94 THROUGH 113.

SECTION 103, DELETE LINES 136 THROUGH 229.

SECTION 103, AFTER LINE 230, INSERT AS FOLLOWS:

*(e) Guidelines for Determining Good Faith Efforts. Appendix A of 49 CFR Part 26 has been used for guidance in preparing the Department's procedures to determine the adequacy of good faith efforts. Additional factors consistent with 49 CFR Part 26, and the Department's policies and procedures have also been utilized.*

*The following factors will be considered in determining good faith efforts. The Contractor, including DBE Contractors, shall submit evidence on each of the factors.*

- 1. The Contractor shall make reasonable effort to contact all ready, willing, and able DBEs who express a desire to work on any of the pay items of the contract.*
- 2. To effectively participate, the DBE shall have the opportunity to analyze the contract and submit quotations prior to letting. Information provided by the Contractor to the DBEs shall include, at a minimum, the contract number, pay items, quantities for those pay items to be subcontracted, and the date the subcontract bid is desired.*

3. *The Contractor shall select the portions of the work to be performed by DBEs in order to increase the likelihood of DBE participation. This shall include, where appropriate, an attempt to break down the contract into economically feasible units to facilitate DBE participation.*
4. *The Contractor and DBE Supportive Services shall provide the interested DBEs with complete information about the plans, specifications, and requirements of the contract. Attempts shall be made to have plans available or to notify the DBE of the location of available plans. The Contractor shall notify the DBE of revisions to the contract.*
5. *It will be considered unacceptable to avoid subcontracting to DBEs if such subcontracting to DBEs results in the need to further subdivide remaining work items.*
6. *The Contractor shall negotiate in good faith with interested DBEs and not reject such DBEs as unqualified without sound reasons based on thorough investigation of their capabilities. Confirmed documentation that a DBE has not been able to perform previous work through no fault of others will be considered to be sound reason. Unacceptable criteria include, but are not limited to, unsubstantiated oral statements and unsigned documentation.*
7. *The Contractor shall make efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance required by the State. However, the Contractor shall affirmatively consider waiving requirements it may have in order to assist the DBE.*
8. *Only firms certified as DBEs prior to the letting date can be used to meet the contract goal for the Department's DBE Program.*

**(f) Affirmative Action Certification.** The Affirmative Action Certification, included in the Proposal book, shall be completed when the Proposal book is submitted to the Department. The certification shall list DBEs or shall state the reasons DBEs are not listed. Blank certifications shall cause the bid to be rejected. If a portion of a pay item is to be performed by a DBE, an explanation shall be included stating exactly what the DBE is performing or supplying. Failure to do so may affect the award of the contract. *In addition to the listing of DBE firms that will be used to meet the goal, the Contractor shall also provide a total for the amount of work that it anticipates will be performed by other DBE firms on the contract beyond the goal requirements.*

*The certification shall indicate whether the award basis is race/gender neutral or race/gender conscious. Race/gender neutral awards involve the utilization of a DBE firm because the DBE firm is the best firm to perform the work. Race/gender conscious awards involve the utilization of a DBE firm primarily to achieve the contract DBE goal.*

SECTION 103, BEGIN LINE 253, DELETE AND INSERT AS FOLLOWS:

Upon receipt of notification from the Department, a Disadvantaged Business Enterprise Utilization Affidavit, Form ~~MBE-3~~ DBE-3, shall be completed by the Contractor and returned to the Department. The Contractor and the subcontractor/lessor/supplier shall certify on Form ~~MBE-3~~ DBE-3 that specific amounts have been paid and received. *A DBE-3 Form certification shall be completed and submitted for every DBE utilized on the contract, not just those listed on the Affirmative Action Certification.*

SECTION 103, BEGIN LINE 268, DELETE AND INSERT AS FOLLOWS:

~~the DBE, or leased from another DBE, that are utilized on the project. DBE-hauling lessors who sublease a portion of their hauling shall take positive affirmative actions to sublease to DBEs and shall provide Form MBE-2 to the Department, evidencing those efforts prior to commencing work. Trucks that are leased by a DBE for a period of at least 12 months will be considered the same as trucks owned by the DBE. In addition, DBE credit will also be given for any fee or commission the DBE receives as a result of the lease arrangement for any additional non-DBE trucks.~~

*In order to count leased trucks towards the goal, the lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from being used by others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE. The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting the DBE goals.*

SECTION 103, BEGIN LINE 287, DELETE AND INSERT AS FOLLOWS:

**(i) Records and Reports.** The Contractor shall keep such records as necessary to determine compliance with its DBE utilization obligations and compliance with the Guidelines for *Determining Good Faith Efforts for Goal Contracts*. The records kept by the Contractor shall indicate the minimum requirements as follows:

SECTION 103, AFTER LINE 311, INSERT AS FOLLOWS:

**(j) Good Faith Efforts Procedures.** *The Contractor will be considered to have made good faith efforts if it either*

- (1) Documents that it has obtained enough DBE participation to meet the goal, or*
- (2) Documents that it made adequate good faith efforts to meet the goal even though it did not succeed in obtaining enough DBE participation to do so.*

*If a DBE goal has been established for the contract, the Contractor shall take good faith efforts to achieve the established goal prior to the bid opening. The Affirmative Action Certification shall be completed and submitted with the Proposal book to indicate proposed DBE utilization or to state the reasons no DBEs are listed and submitted with the Proposal book.*

*If no DBEs are listed, the reasons shall include an explanation of what positive efforts have been taken to achieve the DBE goal. Submission of an incomplete statement may result in rejection of the bid.*

*The award of the contract will be made to the lowest and best bidder when all other requirements have been met and good faith efforts have been taken toward meeting the DBE goal, if required, in accordance with these requirements.*

*If the apparent low bidder has achieved less than the DBE goal, the bidder shall have three business days after notification to provide the Department with evidence of its good faith efforts. All affirmative actions taken to achieve the goal shall be identified. Failure to respond within the three business day period will result in rejection of the bid, and may result in forfeiture of the bid bond, and the referral of the Contractor to the Prequalification Committee.*

*Responses shall be forwarded to the Department's Contracts Engineer. Good faith efforts of the Contractor will be reviewed for compliance with these requirements. If the Commissioner determines that adequate good faith efforts have been made, the contract will be awarded.*

*If the Commissioner determines that the good faith efforts were inadequate, the Department may either reject all bids or award to the next eligible low bidder. The Contractor shall agree to waive all claims of whatever nature arising out of the Commissioner's decision. An apparent low bidder who has not met the DBE goal and requirements for good faith efforts may be requested not to rebid on this contract during subsequent lettings.*

*The Commissioner's decision that the Contractor's good faith efforts were inadequate will be final, unless within 15 calendar days of receipt of the Commissioner's determination, a written objection is filed with the Commissioner to the attention of the Contracts Engineer. A written objection shall contain a complete statement of all objections and a request for a hearing. Upon receipt of an objection, the Commissioner will appoint an administrative law judge. The administrative law judge will set or arrange the administrative hearing. The hearing will be held in accordance with Indiana's Administrative Orders and Procedures Act. The Contractor will be notified of the date, time, and place of the hearing. A record of the hearing will be kept. The Contractor will bear burden of proof to establish the factual basis for its objection. Prior to the hearing, the Contractor may have access to the data submitted to the Department and the DBE Certification attached to the Proposal book. No one may see the Schedule of Pay Items. The Contractor shall be free to be represented by counsel, to subpoena witnesses, and to cross-examine witnesses.*

*Subsequent to the hearing, the administrative law judge will make written findings of fact and conclusion of law and make written notice of the recommended order to the Commissioner and all persons who were parties to the hearing.*



*The Contractor may, within 15 calendar days after receipt of the administrative law judge's recommended order, file with the Commissioner its objections to the recommended order. Written objections shall contain a complete statement of all objections and a request for a review of the administrative law judge's recommended order.*

*Upon receipt of an objection, the Commissioner will proceed in accordance with the provisions of Indiana Code 4-21.5-3-29. If no objection is filed, the Commissioner will issue a final order pursuant to IC 4-21.5-3-29(f).*

*The Commissioner's final order will be the final decision of the Department. A party objecting to the Commissioner's decision may seek legal remedies through judicial review.*

SECTION 103, AFTER LINE 323, INSERT AS FOLLOWS:

**103.02.1 Record Keeping.** *All firms performing work on Department contracts, bidding on Department contracts, or offering quotes for subcontracts or trucking services shall register with the Department, annually, by submitting the following information to the Department's Civil Rights Division, Room N855, 100 N. Senate Avenue, Indianapolis, IN 46204 or fax it to (317)-233-0891.*

- (a) firm's name;*
- (b) firm's address;*
- (c) firm's status as a DBE or non-DBE;*
- (d) the age of the firm; and*
- (e) the annual gross receipts of the firm*
- (f) approximately how many Department projects has the firm bid or quoted in the past 12 months. (If none, please indicate 0)*
- (g) in which of the following markets has the firm participated?*
  - 1. prime contractor*
  - 2. subcontractor*
  - 3. trucking firm*
  - 4. consultant*

SECTION 109, AFTER LINE 573, INSERT AS FOLLOWS:

*Within 10 business days of receipt of payment for any such estimate, the Contractor shall make payment to all subcontractors for the value of their work performed and materials complete in place in accordance with this contract. Failure to comply with this clause shall constitute a material breach of the contract and may result in sanctions under the contract.*

*Any delay or postponement of payment among the parties may take place only for good cause, with the Department's written approval. The explanation from the Contractor shall be made in writing to the Department.*

EXECUTIVE ORDER 11246

The Standard Specifications are revised as follows:

SECTION 103, LINE 324, DELETE AND INSERT AS FOLLOWS:

**103.03 ~~Blank~~ Executive Order 11246: Notice of Requirements for Affirmative Action to Ensure Equal Employment Opportunity.** *This requirement will apply only to a federal aid contract. The Code of Federal Regulations 41 CFR 60-4.2(d) is amended by revising Paragraph 2 of the Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246), to read as follows:*

2. *The Contractor's or Bidder's attention is called to the Equal Opportunity Clause and the Standard Federal Equal Employment Opportunity Construction Contract Specifications set forth herein.*

**(a) Timetables.** *The timetables for minority and female participation for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:*

1. **Minorities.** *Immediately.*
2. **Women.** *April 1, 1980 to indefinite.*

*The goals are shown in 103.03(j) and 103.03(k).*

*Contractors who are signatory to an area (Hometown) plan are covered by 103.03(b). All Contractors, signatory or not to an area (Hometown) plan, will be covered by the minority goals as shown in 103.03(j).*

*These goals are applicable to all the Contractor's construction work, whether or not it is Federal or federally-assisted, performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed, in accordance with 41 CFR 60-4 as set out in Volume 45, No. 194 of the Federal Register dated October 3, 1980. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and nonfederally involved construction.*

**(b) Area (Hometown) Plans.** *Until further notice, the following goals and timetables for minority utilization shall be included in all Federal or federally-assisted construction contracts and subcontracts in excess of \$10,000.00 to be performed in the respective covered areas. The goals are applicable to the Contractor's aggregate on-site construction workforce whether or not part of that workforce is performing work on a Federal or federally-assisted construction contract or subcontract.*

**1. Cincinnati, Ohio Area.** *Area Covered: Ohio counties of Clermont, Hamilton, and Warren; Kentucky counties of Boone, Campbell, and Kenton; and Indiana county of Dearborn. The minority hiring goal in Dearborn County, Indiana is 11 percent.*

**2. Indianapolis, Indiana Area.** *Area Covered: Marion County. The minority hiring goal in Marion County is 12.5 percent.*

**(c) Written Notification.** *The Contractor shall provide written notification to the Department within ten work days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor, employer identification number, estimated dollar amount of the contract, estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.*

**(d) 41 CFR 60-4.3 Equal Opportunity Clauses.** *The equal opportunity clause published as 41 CFR 60-1.4(a) of this chapter is required to be included in, and is part of, all nonexempt Federal contracts and subcontracts, including construction contracts and subcontracts. The equal opportunity clause published at 41 CFR 60-1.4(b) is required to be included in, and is a part of, all nonexempt federally-assisted construction contracts and subcontracts. In addition to the clause described above, all Federal contracting officers, all applicants and all nonconstruction Contractors, as applicable, shall include the specification set forth in this section in all Federal and federally-assisted construction contracts in excess of \$10,000.00 to be performed in geographical areas designated by the Department pursuant to 41 CFR 60-4.6 of this part and in construction subcontracts in excess of \$10,000.00 necessary in whole or in part to the performance of nonconstruction Federal contracts and subcontracts covered under the Executive Order.*

1. *As used in these specifications:*

- a. *"Covered area" means the geographical area described in the solicitation from which this contract resulted.*
- b. *"Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority.*
- c. *"Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.*
- d. *"Minority" includes:*
  - (1) *Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);*
  - (2) *Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);*



6. *In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.*
7. *The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:*
  - a. *Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.*
  - b. *Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organization when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.*
  - c. *Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.*
  - d. *Provide immediate written notification to the Department when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.*

- e. *Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the source compiled under 7b above.*
- f. *Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.*
- g. *Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.*
- h. *Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.*
- i. *Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.*

- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of the Contractor's workforce.*
  - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.*
  - l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to see or to prepare for, through appropriate training, etc., such opportunities.*
  - m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices, do not have discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.*
  - n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.*
  - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.*
  - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.*
- 8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations under 7.a. through 7.p. of this specification. The efforts of a contractors' association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7.a. through 7.p. of this specification provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female*

*workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.*

9. *A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).*
10. *The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.*
11. *The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.*
12. *The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspensions, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.*
13. *The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in Paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, of these specifications, the Department will proceed in accordance with 41 CFR 60-4.8.*



14. *The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records.*

*Records shall at least include for each employee the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, Contractors shall not be required to maintain separate records.*

15. *Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).*

*The notice set forth in 41 CFR 60-4.2 and the specifications set forth in 41 CFR 60-4.3 replace the New Form for Federal Equal Employment Opportunity Bid Conditions for Federal and Federally-Assisted Construction published as 41 CFR 32482 and commonly known as the Model Federal EEO Bid Conditions. The New Form shall not be used after the regulations in 41 CFR part 60-4 become effective.*

*(e) **41 CFR 60-4.5 Hometown Plans.** If the Contractor is participating, either individually or through an association, in an approved Hometown Plan (including heavy highway affirmative action plans) it shall comply with its affirmative action obligations under Executive Order 11246 by complying with its obligations under the Plan: Provided, that each Contractor or subcontractor participating in an approved Plan is individually required to comply with the equal opportunity clause set forth in 41 CFR 60-1.4; to make a good faith effort to achieve the goals for each trade participating in the Plan in which it has employees; and that the overall good performance by other Contractors or subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or subcontractor's failure to take good faith efforts to achieve the Plan's goals and timetables. If the Contractor is not participating in an approved Hometown Plan it shall comply with the specifications set forth in 41 CFR 60-4.3 and with the goals and timetables for the appropriate area as listed in the Notice required by 41 CFR 60-4.2 with regard to that trade. For the purposes of 41 CFR 60-4, the Contractor is not participating in a Hometown Plan for a particular trade if it:*

1. *Ceases to be signatory to a Hometown Plan covering that trade.*
2. *Is signatory to a Hometown Plan for that trade but is not party to a collective bargaining agreement for that trade.*

3. *Is signatory to a Hometown Plan for that trade but is party to a collective bargaining agreement with labor organizations which are not or cease to be signatories to the same Hometown Plan for that trade.*
4. *Is signatory to a Hometown Plan for that trade and is party to a collective bargaining agreement with a labor organization for that trade but the two have not jointly executed a specific commitment in the Hometown Plan for that trade.*
5. *In participating in a Hometown Plan for that Trade which is no longer acceptable to the Office of Federal Contract Compliance Programs.*
6. *Is signatory to a Hometown Plan for that trade but is party to a collective bargaining agreement with a labor organization for that trade and the labor organization and the Contractor have failed to make a good faith effort to comply with their obligations under the Hometown Plan for that trade.*
7. *If the Contractor participates in Hometown Plans, it must be able to demonstrate its participation and document its compliance with the provisions of the Hometown Plan.*

**(f) 41 CFR 60-4.6 Goals and Timetables.** *The Department, from time to time, shall issue goals and timetables for minority and female utilization which shall be based on appropriate workforce, demographic or other relevant data and which shall cover construction projects, or construction contracts performed in specific geographical areas. The goals shall be applicable to each construction trade in a covered Contractor's or subcontractor's entire workforce which is working in the area covered by the goals and timetables, shall be published as notices in the Federal Register, and shall be inserted by the contracting officers and applicants, as applicable, in the Notice required by 41 CFR 60-4.2.*

**(g) 41 CFR 60-4.7 Effect on Other Regulations.** *The regulations in this part are in addition to the regulations contained in this chapter which apply to construction Contractors and subcontractors generally. So particularly, 41 CFR 60-1.4(a), (b), (c), (d), and (e); 60-1.5; 60-1.5; 60-1.7; 60-1.8; 60-1.26; 60-1.29; 60-1.30; 60-1.32; 60-1.42; 60-1.43; and 41 CFR part 60-3; part 60-20; part 60-30; part 60-40; and part 60-50.*

**(h) 41 CFR 60-4.8 Show Cause Notice.** *If an investigation or compliance review reveals that a construction Contractor or subcontract has violated the Executive Order, any contract clause, specifications or the regulations in this chapter and if administrative enforcement is contemplated, the Department will issue to the Contractor or Subcontractor a notice to show cause which shall contain the items specified in Ii10-(iv) of 41 CFR 60-2.2(c)(1). If the Contractor does not show good cause within 30 days, or in the alternative, fails to enter an acceptable conciliation agreement which includes where appropriate, make up goals and timetables, back pay, and seniority relief for affected class members, the compliance agency shall follow the procedure described in 41 CFR 60-1.26(b), provided that where a conciliation agreement has been violated, no show cause notice is required prior to the initiation of enforcement proceedings.*

**(i) 41 CFR 60-4.9 Incorporation by Operation of the Order.** *By operation of the Order, the equal opportunity clause contained in 41 CFR 60-1.4, 41 CFR 60-4.2, and 41 CFR 60-4.3 shall be deemed to be a part of every solicitation or of every contract and subcontract, as appropriate, required by the Order and regulations in this chapter to include such clauses whether or not they are physically incorporated in such solicitation or contract and whether or not the contract is written.*

**(j) Minority Hiring Goals by County.**

COUNTY	PCT.	COUNTY	PCT.	COUNTY	PCT.
Adams	4.4	Hendricks	12.5	Pike	3.5
Allen	4.4	Henry	3.9	Porter	20.9
Bartholomew	9.7	Howard	4.4	Posey	4.8
Benton	1.5	Huntington	4.4	Pulaski	18.4
Blackford	3.9	Jackson	9.7	Putnam	9.7
Boone	12.5	Jasper	18.4	Randolph	3.9
Brown	9.7	Jay	3.9	Ripley	9.2
Carroll	1.5	Jefferson	9.6	Rush	9.7
Cass	3.7	Jennings	9.7	St. Joseph	7.1
Clark	11.2	Johnson	12.5	Scott	9.6
Clay	3.1	Knox	3.5	Shelby	12.5
Clinton	1.5	Kosciusko	6.2	Spencer	3.5
Crawford	9.6	LaGrange	6.2	Starke	18.4
Daviess	9.7	Lake	20.9	Steuben	4.4
Dearborn	11.0	LaPorte	18.4	Sullivan	3.1
Decatur	9.7	Lawrence	9.7	Switzerland	9.2
Dekalb	4.4	Madison	4.9	Tippecanoe	2.7
Delaware	5.3	Marion	12.5	Tipton	4.4
Dubois	3.5	Marshall	7.1	Union	3.9
Elkhart	4.0	Martin	9.7	Vanderburgh	4.8
Fayette	3.9	Miami	3.7	Vermillion	3.1
Floyd	11.2	Monroe	3.1	Vigo	3.1
Fountain	1.5	Montgomery	1.5	Wabash	3.7
Franklin	9.2	Morgan	12.5	Warren	1.5
Fulton	6.2	Newton	18.4	Warrick	4.8
Gibson	4.8	Noble	4.4	Washington	9.6
Grant	3.7	Ohio	9.2	Wayne	3.9
Greene	9.7	Orange	9.6	Wells	4.4
Hamilton	12.5	Owen	9.7	White	1.5
Hancock	12.5	Parke	2.5	Whitley	4.4
Harrison	9.6	Perry	3.5		

**(k) Female Hiring Goal.** *The female hiring goal is 6.9 percent throughout the State. Minority females may be counted both as a minority and as a female. Double counting will be permitted for reporting on Form CC-257.*

MUTCD

The Standard Specifications are revised as follows:

SECTION 101, BEGIN LINE 63, DELETE AS FOLLOWS:

MUTCD Indiana Manual on Uniform Traffic Control Devices, ~~or Federal Manual on Uniform Traffic Control Devices~~ in accordance with 107.12.

SECTION 107 BEGIN LINE 372, DELETE AS FOLLOWS:

Barricades, warning signs, lights, signals, markings, and other protective devices shall be in accordance with the plans, ~~the Federal MUTCD~~ and the Indiana MUTCD, ~~all of which are~~ current on the date of advertisement for bids.

~~In case of discrepancy, the Federal MUTCD shall prevail if the contract involves Federal funds. For such a contract, Part VI of the Federal MUTCD as revised September 3, 1993 shall be used in lieu of Part VI of the Federal MUTCD, 1988 Edition.~~

~~If the contract does not involve Federal funds, the Indiana MUTCD shall prevail. For such a contract, Part VI of the Federal MUTCD as revised September 3, 1993 shall be used as a guide. If it is in conflict with Part VI of the Indiana MUTCD, the Indiana MUTCD shall prevail.~~

SECTION 107, BEGIN LINE 421, DELETE AND INSERT AS FOLLOWS:

flagger situations. The "Stop"/"Slow" paddle shall be required as a primary hand signaling device to control traffic through work areas. The "Stop"/"Slow" paddle shall be in accordance with section ~~6F-2~~ 6E.03 of the MUTCD, except it shall be at least 610 mm (24 in.) wide.

HOLIDAYS

The Standard Specifications are revised as follows:

SECTION 101, BEGIN LINE 189, INSERT AS FOLLOWS:

*On the following holidays no equipment or material will be transported to or from the project on open roads, includes roads within the project.*

*Memorial Day:*

*12:00 noon Friday, May 27<sup>th</sup> until 6:00 a.m. Tuesday, May 31<sup>st</sup> 2005.*

ENGINEER APPLICATION PERSONAL COMPUTER

The Standard Specifications are revised as follows:

SECTION 105, DELETE LINES 1001 THROUGH 1093.

SECTION 105, AFTER LINE 1094, INSERT AS FOLLOWS:

*The computer shall be in accordance with the requirements shown below.*

1. *Desktop System.*
  - a. *Microprocessor: Intel Pentium, 1.9 GHz, or faster.*
  - b. *256 MB RAM, or larger.*
  - c. *One 1.44 MB 3.5 in. floppy disk drive.*
  - d. *One fixed disk (hard drive), minimum 40 GB.*
  - e. *24X CD ROM drive, or faster.*
  - f. *Sound blaster compatible sound system.*
  - g. *An SVGA display adapter, 32 Mb video ram minimum.*
  - h. *MPEG video.*
  - i. *A minimum of one serial port.*
  - j. *One parallel port.*
  - k. *One mouse and mouse pad.*
  - l. *A 101 key enhanced keyboard, minimum*
  - m. *A 56 KB V.90 modem*
  - n. *Operating system shall be Windows XP (Home or Pro). The Contractor shall provide and install in a timely manner all critical updates/patches concerning security and virus control to the Operating Systems when necessary.*
  
2. *SVGA Display.*
  - a. *A 432 mm (17 in.) color display monitor, or larger.*
  - b. *1024 x 768 resolution, or better.*
  - c. *Dot pitch 0.28 mm, or better.*
  
3. *An inkjet printer shall be provided meeting or exceeding the following.*
  - a. *HP compatible print codes.*
  - b. *Fully compatible with DOS programs. HP Deskjet 600 or 900 series or 3820 or 5550. Other brand printers or models are acceptable if they are equal to the above printers and capable of printing from Paradox for DOS. The connection shall be via parallel port. USB connections are not acceptable.*
  
4. *Software.*
  - a. *Paradox, Ver. 4.5 for DOS, if available. If the Contractor cannot provide this software, the Contractor shall notify the appropriate Department District computer specialist.*
  - b. *Microsoft Office XP, or newer*
  - c. *All install CDs for the Operating System, device drivers, and all software installed on the PC shall remain at the construction field office site in case that re-installation or re-configuration is required.*
  - d. *McAfee antivirus software for Windows This shall be the latest version and shall be fully installed, with Vshield option activated. The Department will provide periodic updates for the DAT and associated files containing new virus names, etc. The Contractor may provide this service if it so desires.*

5. *Miscellaneous Requirements.*

- a. *Uninterruptible Power Supply (UPS) minimum 280VA/175W (15 minutes) with full time surge suppression and noise isolation, including RJ-11 connections for modem phone line surge protection. American Power Conversion (APC) model Back-UPS Pro 280 (APC part # BP280), or equivalent.*
- b. *Dust covers for system unit, monitor, and printer.*
- c. *Black ink cartridges and 8 1/2" x 11" sheet paper for inkjet printers shall be supplied and replenished as needed.*
- d. *A supplemental phone line in addition to the standard telephone line shall be installed and connected to the PC modem through the UPS surge protection described above. If a supplemental phone line is being installed to accommodate a FAX machine, this same line may be used for joint FAX and PC communications using a line splitter or other appropriate device.*

*The requirements shown herein shall be considered as minimum requirements. Equipment or software which exceeds these requirements may be furnished, except where DOS or Windows is specified.*

*All manuals necessary for operation of the system shall be provided. These shall include manuals for microcomputer operations, Windows operating system, monitor operation, printer operation and code references, and all other manuals or documentation normally furnished with the equipment or software when purchased. Appropriate dust covers shall be provided for all equipment.*

*The initial condition of the field office PC shall be nearly pristine. No owner installed e-mail accounts, games, spyware, online services, applications, network or other profiles shall be set up on this computer prior to placement. If the PC was used in a previous contract, all software not specified above, or otherwise provided by the Department, shall be removed prior to placement in the current field office.*

*The microcomputer system in the field office shall be installed, and maintained in good working order. If a portion of the system becomes defective, inoperative, damaged, or stolen, that portion shall be repaired or replaced within five business days, Mondays through Fridays, after the Contractor is notified of such situation.*

*Department will be utilizing the hardware and software specified herein to run Construction Management System software applications. These applications are known to run on Intel compatible equipment. If the Department experiences problems running these applications due to requirement compatibility, the Contractor shall, within five business days, Mondays through Fridays, replace and set up appropriate equipment to ensure compatibility to the satisfaction of the Department.*

---

FAX MACHINE IN FIELD OFFICE  
(ADVANCED FEATURES)

The Standard Specifications are revised as follows:

SECTION 105, LINE 956, DELETE AND INSERT AS FOLLOWS:

- b. automatically dial a minimum of ~~25~~ 40 preprogrammed FAX numbers, and have the ability to program at least 2 groups of numbers;

SECTION 105, AFTER LINE 988, INSERT AS FOLLOWS:

- (6) telephone list

SECTION 105, AFTER LINE 996, INSERT AS FOLLOWS:

- n. automatically redial a number if line is busy, up to 3 times;
- o. have the ability to send messages in off-peak hours when rates are lower

---

CONSTRUCTION ENGINEERING

The Standard Specifications are revised as follows:

SECTION 105, BEGIN LINE 189, INSERT AS FOLLOWS:

The Contractor shall be responsible for the accuracy of transfer from the control lines and grades and layout of the work. *The Contractor shall notify the Engineer and the District Traffic Section to locate all existing underground traffic signal and lighting wiring. The District Traffic Section will only perform this locate service once per construction season per contract.* The Contractor shall also be responsible for the preservation of all stakes and marks. If the construction stakes or marks are carelessly or willfully destroyed or disturbed by the Contractor or its employees, the cost to the Department for replacing them will be charged against the Contractor. Such costs will be deducted from payment for the work.

SECTION 105, BEGIN LINE 207, INSERT AS FOLLOWS:

**(b) Construction Engineering by the Contractor.** If set out as a pay item, the construction engineering, including all staking and layout usually done by the Department, shall be performed by the Contractor. Construction engineering shall include re-establishing the survey points and survey centerlines; referencing the necessary control points; running a level circuit to check or re-establish plan bench marks; running a level circuit to establish elevations on new bench mark tablets; setting stakes for right-of-way, culverts, slopes, subbase, ~~subsurface~~ underdrains, paving, subgrade, bridge piers, abutments, and all other stakes required for control lines and grades; and setting vertical control elevations, such as footings, caps, bridge seats, and screed elevations. *Construction engineering shall also include documenting the underground wiring as located by the District Traffic Section.*

*The Contractor, shall notify the District Traffic Section to locate all existing underground traffic signal and lighting wiring. The District Traffic Section will only perform this locate service once per construction season per contract. The required documentation shall be performed and a copy provided to the Engineer as soon as practical after the locations have been marked. Documentation which is not provided to the Engineer in a timely manner shall not be considered valid for the purpose of resolving conflicts related to the accuracy of the location markings. The documentation may be digital pictures, regular photos, or sketches of the areas marked. The documentation shall be such that the underground wiring can be easily and accurately re-established in the field by the Contractor, if needed.*

A complete cross section shall be taken at each 150 m (500 ft) interval. Horizontal control shall be checked at the beginning and ending of the mainline and all "S" lines. This information shall be used to verify that the planned alignment and elevations will match existing conditions. Required alignments and elevations will be shown on the plans. Prior to incorporating

BASIS FOR USE OF APPROVED OR PREQUALIFIED MATERIALS

The Standard Specifications are revised as follows:

SECTION 106, AFTER LINE 45, INSERT AS FOLLOWS:

*The basis for use of materials shown in the List of Approved or Prequalified Materials will be the Engineer's verification that the materials provided are included in the List of Approved or Prequalified Materials.*



EQUAL EMPLOYMENT OPPORTUNITY TRAINEES

A total of 1000 training hours are assigned to this contract.

This requirement does not apply if the Contractor is participating in the pilot program as approved by the Department.

---

---

TRAFFIC CONTROL DEVICE REPORT

The Standard Specifications are revised as follows:

SECTION 107, AFTER LINE 389, INSERT AS FOLLOWS:

*A traffic control device report shall be completed weekly by the Contractor and a signed copy given to the Engineer. The cost of the report will not be paid for directly but shall be included in the cost of other items.*

---

---

STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES,  
ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS

The Standard Specifications are revised as follows:

SECTION 107, AFTER LINE 690, INSERT AS FOLLOWS:

***107.25 Existing Conditions of Utilities, Additional Right-of-Way, and Encroachments.*** *Such existing conditions are as described below.*

*(a) Utilities. The status of all utility companies and organizations potentially involved with the work to be performed are described below.*

*The facilities of Insight Communications of Peru exist within the project limits, but are not expected to be affected by the proposed construction. If questions arise, Tracy Michael of the utility may be contacted at 765-348-4858.*

*The facilities of Countrymark Cooperative exist within the project limits, but are not expected to be affected by the proposed construction. If questions arise, Mikey T. Smith of the utility may be contacted at 812-838-8111.*

*The facilities of Miami Cass REMC exist within the project limits, but are not expected to be affected by the proposed construction. If questions arise, James Yates of the utility may be contacted at 765-473-6668.*

*The facilities of Peru Utilities exist within the project limits, but are not expected to be affected by the proposed construction. If questions arise, Jeff Plochow of the utility may be contacted at 765-473-3652.*

*The facilities of SBC Communications exist within the project limits, but are not expected to be affected by the proposed construction. If questions arise, Robert Lapan of the utility may be contacted at 317-398-6681.*

**(b) Right-of-Way.** *There is no involvement of additional right-of-way for the contract.*

**(c) Encroachments.** *There is no involvement of encroachments for the contract.*

**(d) Other Noteworthy Conditions.** *There are no other noteworthy conditions which may affect the prosecution and progress of the contract.*

**(e) Preconstruction Conference Notification.** *The Contractor shall provide notification during the preconstruction conference about known corrections to or omissions of the information presented in 107.25(a) through 107.25(d) above. Otherwise, notification shall be provided as required in 105.06. Notifications regarding such corrections or omissions shall not alleviate the Contractor's inquiry or interpretation obligations as contained in 120 IAC 3-6-6.*

---

FAILURE TO COMPLETE ON TIME FOR CALENDAR COMPLETION DATE

The Standard Specifications are revised as follows:

SECTION 108, DELETE LINES 469 THROUGH 470h.

SECTION 108, AFTER LINE 471, INSERT AS FOLLOWS:

*If the contract is not completed on or before the contract completion date shown on the Proposal sheet, \$500 will be assessed as liquidated damages, not as a penalty, but as damages sustained, for each calendar day that the contract is not complete.*

*Extension of contract time, if required, shall be in accordance with 108.07.*

---

DETERMINATION AND EXTENSION OF CONTRACT

The Standard Specifications are revised as follows:

SECTION 108, BEGIN LINE 312, INSERT AS FOLLOWS:

The number of days for performance permitted in the contract as awarded will be based on the original quantities as defined in 104.02.

- (a) For a completion date contract, unless otherwise determined, an increase in quantities will increase the time permitted for the performance of the contract by the ratio of the final contract price to the original contract price. *The final contract price used in the calculation will not include items that do not reflect additional work performed by the Contractor, such as incentives, disincentives, QA adjustments, failed material adjustments, material substitutions, or other similar items.* The contract time shall be the number of calendar days starting with the day after the letting, to and including the original contract completion date.

- (b) If intermediate completion times are specified, unless otherwise determined, an increase in quantities will increase the time permitted. This will be computed by the ratio of the original dollar amounts to the final dollar amounts of only those pay items which are involved in the closure or restrictions work. *Items that do not reflect additional work performed by the Contractor, such as incentives, disincentives, QA adjustments, failed material adjustments, material substitutions, or other similar items will not be included in the final dollar amounts of the pay items used in the computation.* When computing such time, the number of days specified for the intermediate completion time will be used. If a calendar date is specified, the number of calendar days will be computed by starting with the day after the letting, and continuing to and including the intermediate completion date.

#### STOCKPILED MATERIALS

The Standard Specifications are revised as follows:

SECTION 111, BEGIN LINE 9, DELETE AND INSERT AS FOLLOWS:

vicinity of the project, or stored in approved storage facilities. Such materials shall be limited to structural steel, concrete structural members, ~~pavement~~ reinforcing steel, pavement contraction joints, granular base and subbase materials, aggregates for HMA and concrete pavements, and structural supports for signals, signs, and luminaires.

*In addition to the aforementioned, the Department will consider the stockpiling of other steel products, such as guardrail, culvert pipe, etc if it has been determined that a critical shortage of that material would cause delay to the project.*

SECTION 111, BEGIN LINE 109, DELETE AND INSERT AS FOLLOWS:

Approval of partial payment for stockpiled materials will not constitute final acceptance of such materials for use in completing the work. Structural steel members and ~~pavement~~ reinforcing steel may be subjected to additional inspection and testing prior to final acceptance and incorporation into the work. All other stockpiled pay items will be subjected to additional inspection and testing prior to final acceptance and incorporation into the work.

#### DEMOLITION/RENOVATION NOTIFICATION TO IDEM

The Standard Specifications are revised as follows.

SECTION 202, AFTER LINE 33, INSERT AS FOLLOWS:

*In accordance with IAC 14-10, the Contractor shall complete and submit a demolition/renovation notification to IDEM when demolition or renovation of buildings, houses, canopies, and bridges are part of the contract. This notification shall be submitted regardless of whether asbestos containing material is present. Each notification form submitted to IDEM may have a maximum of 10 structures listed on the form. For the purposes of this form, a structure includes a building, house, canopy, or a bridge. Fees for this demolition/renovation notification are \$50.00 per notification and shall be paid to IDEM by the Contractor.*

*Copies of the demolition/renovation notification form can be obtained at: [www.in.gov/icpr/webfile/formsdiv/44593.pdf](http://www.in.gov/icpr/webfile/formsdiv/44593.pdf). Questions concerning the completion of the demolition/renovation notification should be addressed to IDEM's Office of Air Management's toll free number (888) 547-8150. Office hours are Monday through Friday between the hours of 6:30 a.m. and 4:30 p.m. IDEM will assist in proper completion of the notification.*

*Initial notification to IDEM shall be by certified mail, return receipt requested, or by hand delivery. Verification of this notification shall be provided to the Engineer. The Contractor shall provide such notification 10 work days prior to the date on which demolition or renovation operations are anticipated to begin. If the Contractor postpones the beginning date of demolition or renovation operations, IDEM shall be provided written notice of the new start date, postmarked at least five work days or delivered at least two work days before these operations begin. Verification of this notification shall also be provided to the Engineer.*

SECTION 202, BEGIN LINE 275, DELETE AND INSERT AS FOLLOWS:

**202.06.1 Inspection and Removal of Asbestos.** The Contractor shall comply with all applicable environmental regulations including but not limited to those as follows:

- (a) ~~326 IAC 14-10 requires notification to the IDEM of all demolition or renovation operations. Notification is required for renovation operations only if reportable quantities of asbestos are broken, dislodged or disturbed during the renovation procedure. Initial notification to IDEM shall be by certified mail, return receipt requested, or by hand delivery. Verification of this notification shall be provided to the Engineer. The Contractor shall provide such notification 10 work days prior to the date on which removal or demolition operations are anticipated to begin. In accordance with 202.02 and IAC 14-10, a demolition/renovation notification is to be submitted to IDEM 10 work days prior to the start of demolition or renovation operations. During the 10 work day period, the IDEM may make a determination of the existence of asbestos materials. If the Contractor postpones the beginning date of demolition or removal operations, the IDEM shall be provided written notice of the new start date, postmarked at least five work days or delivered at least two work days before removal or demolition begins. Verification of this notification shall also be provided. Local governmental agencies may have additional regulations that must be followed. The Contractor shall contact IDEM's air management office to determine what local agencies have regulations.~~

HMA REVISIONS FOR 2005

The Standard Specifications are revised as follows:

SECTION 401, BEGIN LINE 714, DELETE AND INSERT AS FOLLOWS:

- Standard Practice for ~~Short and Long Term~~ Mixture Conditioning  
Aging of Hot-Mix Asphalt (HMA)..... AASHTO R 30*
- Standard Practice for Designing Superpave Volumetric  
Design for Hot Mix Asphalt (HMA).....AASHTO PP 28*
- Maximum Specific Gravity and Density of Bituminous  
Paving Mixtures..... AASHTO T 209*
- Resistance of Compacted Bituminous Asphalt Mixture to  
Moisture Induced Damage..... AASHTO T 283*
- Method for Preparing and Determining the  
Density of Hot Mix Asphalt (HMA)  
Specimens by Means of the SHRP Superpave  
Gyratory Compactor..... AASHTO T 312*

SECTION 401, BEGIN LINE 737a, DELETE AND INSERT AS FOLLOWS:

<i>Open Graded, Mixture Designation – Control Point (Percent Passing)</i>		
	<i><del>€19.0</del> OG19.0</i>	<i><del>€25.0</del> OG25.0</i>

SECTION 401, BEGIN LINE 754, DELETE AND INSERT AS FOLLOWS:

*Dense graded mixture shall be tested for moisture susceptibility in accordance with AASHTO T 283 except that the loose mixture curing shall be replaced by ~~short term aging~~ mixture conditioning for 2 h in accordance with AASHTO R 30. The minimum tensile strength ratio, TSR, shall be 80%. The 150 mm (6 in.) mixture specimens shall be compacted in accordance with AASHTO T 312. If anti-stripping additives are added to the mixture to be in accordance with the minimum TSR requirements, the dosage rate shall be submitted with the DMF.*

*The MAF equals the Gmm from the mixture design divided by the following: 2.465 for 9.5 mm mixtures and 2.500 for 12.5 mm, 19.0 mm, and 25.0 mm mixtures. If the MAF calculation results in a value where ~~0.960~~ 0.980 ≤ MAF ≤ ~~1.040~~ 1.020, then the MAF shall be considered to be 1.000. If the calculated MAF is outside of the above range, then the actual calculated value shall be used. The MAF does not apply to OG mixtures.*

SECTION 401, BEGIN LINE 783a, DELETE AND INSERT AS FOLLOWS:

<i>VOIDS IN MINERAL AGGREGATE (VMA) CRITERIA @ <math>N_{des}</math></i>	
<i>Mixture Designation</i>	<i>Minimum VMA, Percent</i>
<i>4.75 mm</i>	<i>16.0</i>
<i>9.5 mm</i>	<i>15.0</i>
<i>12.5 mm</i>	<i>14.0</i>
<i>19.0 mm</i>	<i>13.0</i>
<i>25.0 mm</i>	<i>12.0</i>
<del><i>€19.0 OG19.0 mm</i></del>	<i>NA</i>
<del><i>€25.0 OG25.0 mm</i></del>	<i>NA</i>

SECTION 401, BEGIN LINE 791, DELETE AND INSERT AS FOLLOWS:

*Note 4: For ~~€19.0 OG19.0 mm~~ and ~~€25.0 OG25.0 mm~~ mixtures, VFA is not applicable.*

SECTION 401, BEGIN LINE 809, DELETE AND INSERT AS FOLLOWS:

~~*Mainline surface or open graded mixtures shall not contain recycled materials. Recycled materials shall not be used in ESAL Category 3, 4, or 5 surface mixtures or open graded mixtures.*~~

SECTION 401, BEGIN LINE 858, DELETE AND INSERT AS FOLLOWS:

*The bulk specific gravity of gyratory specimens for dense graded mixtures will be determined in accordance with AASHTO T 166 except samples are not required to be dried overnight. The bulk specific gravity of gyratory specimens for open graded mixtures, ~~€19.0 OG19.0~~, ~~€25.0 OG25.0~~ will be determined in accordance with ASTM D 6752, except as follows. The duration of the test from initiating the vacuum extraction to weighing the specimen after the water bath will not exceed five minutes. The mass of water absorbed by the specimen while in the water bath will be subtracted from the mass of the specimen obtained in the water bath. Any test in which the mass of water absorbed by the specimen exceeds ~~2% of the sample mass~~ 5 g is invalid.*

SECTION 401, BEGIN LINE 880, DELETE AND INSERT AS FOLLOWS:

*The Engineer's acceptance test results for each subplot will be available ~~when~~ after the subplot and testing is are complete.*

SECTION 401, BEGIN LINE 1045, DELETE AND INSERT AS FOLLOWS:

*The Engineer's acceptance test results for each subplot will be available when the subplot testing is complete. Acceptance of the pavement for density (%MSG) will be reported to the nearest 0.1%. Rounding will be in accordance with 109.01(a).*

SECTION 401, BEGIN LINE 1052, DELETE AND INSERT AS FOLLOWS:

**401.18 Pavement Smoothness.** *The pavement smoothness will be accepted by means of a profilograph, a 4.9 m (16 ft) long straightedge, or a 3 m (10 ft) long straightedge.*

*The profilograph shall be used where all of the following conditions are met:*

- (a) the design speed is greater than 70 km/h (45 mph),*
- (b) the pavement lanes are full width and ~~75 m (250 ft)~~ 0.16 km (0.1 mi.) or longer, and*

- (c) *the HMA is placed on a milled surface or the total combined planned lay rate of surface, intermediate, and base is ~~180~~ 210 kg/m<sup>2</sup> (~~330~~ 385 lb/syd) or greater.*

*If a pay item, profilograph, HMA, is included in the contract and the above conditions are met, the Contractor shall furnish, calibrate, and operate an approved profilograph in accordance with ITM 901. The profilogram produced shall become the property of the Department. The profilograph shall remain the property of the Contractor. When a profilograph, HMA, is not included as a pay item, and the above conditions are met, the Department will furnish, calibrate, and operate the profilograph or the Department will develop an extra work agreement in accordance with 109.05 to include profilograph, HMA as a pay item.*

*Within the limits of a smoothness section where the posted speed is 65 km/h (40 mph) or less, smoothness of that section may be measured by a profilograph or a 4.9 m (16 ft) long straightedge. The Contractor shall notify the Engineer of the selected process prior to placement of the HMA. Smoothness pay adjustments are only applicable when measured by a profilograph.*

*The 4.9 m (16 ft) long straightedge shall be used on overlays where the profilograph is not specified. The 4.9 m (16 ft) long straightedge shall be used on all full width pavement lanes shorter than ~~75 m (250 ft)~~ 0.16 km (0.1 mi.), on tapers, within 15 m (50 ft) of ~~bridge ends~~ a reinforced concrete bridge approach, and within 15 m (50 ft) of an existing pavement, which is being joined.*

SECTION 401, BEGIN LINE 1095, DELETE AND INSERT AS FOLLOWS:

*When the profilograph is being used on a surface course, in addition to the requirements for the profile index, all areas having a high or low point deviation in excess of 8 mm (0.3 in.) shall be corrected. Courses underlying the surface courses that are exposed by corrective actions shall be milled to ~~25 mm (1 in.)~~ 38 mm (1 1/2 in.) and replaced with the same type surface materials. The initial profile index shall be determined prior to any corrective action. The final profile index will be determined after all corrective action has been completed.*

SECTION 401, BEGIN LINE 1126, DELETE AND INSERT AS FOLLOWS:

*The sublot quality assurance adjustment for mixture properties and density is calculated as follows.*

$$q = \sum L x U x (SCPF - 1.00) / \underline{MAF}$$

where:

- q = quality assurance adjustment ~~quantity for the sublot~~*
- L = sublot quantity*
- U = unit price for the material, \$/Mg (\$/TON)*
- SCPF = sublot composite pay factor*

~~The quality assurance adjustment points for smoothness will be calculated in accordance with 401.19(c).~~

~~The total quality assurance adjustments is to be calculated as follows:~~

$$Q = Q_s + (\sum q) / MAF$$

~~where:~~

~~Q = total quality assurance adjustment quantity~~

~~Q<sub>s</sub> = quality assurance adjustment for smoothness as calculated in 401.19(c)~~

~~q = quality assurance adjustment quantity~~

SECTION 401, BEGIN LINE 1152a, DELETE AND INSERT AS FOLLOWS:

<u>BINDER CONTENT</u>	
<u>Deviation from JMF (± %)</u>	<u>Pay Factor</u>
<u>≤ 0.2</u>	<u>1.05</u>
<u>&gt; 0.2 and ≤ 0.3</u>	<u>1.04</u>
<u>&gt; 0.3 and ≤ 0.4</u>	<u>1.02</u>
<u>&gt; 0.4 and ≤ 0.5</u>	<u>1.00</u>
<u>&gt; 0.5 and ≤ 0.6</u>	<u>0.95</u>
<u>&gt; 0.6 and ≤ 0.7</u>	<u>0.90</u>
<u>&gt; 0.7 and ≤ 0.8</u>	<u>0.85</u>
<u>&gt; 0.8</u>	<u>0.85 - 0.05 per each 0.1% over 0.8%</u>

<u>BINDER CONTENT</u>		
<u>DENSE GRADED</u>	<u>OPEN GRADED</u>	<u>PAY FACTOR</u>
<u>Deviation from JMF (± %)</u>	<u>Deviation from JMF (± %)</u>	<u>Pay Factor</u>
<u>≤ 0.2</u>	<u>≤ 0.2</u>	<u>1.05</u>
<u>0.3</u>	<u>0.3</u>	<u>1.04</u>
<u>0.4</u>	<u>0.4</u>	<u>1.02</u>
<u>0.5</u>	<u>0.5</u>	<u>1.00</u>
<u>0.6</u>	<u>0.6</u>	<u>0.95</u>
<u>0.7</u>	<u>0.7</u>	<u>0.90</u>
<u>0.8</u>	<u>0.8</u>	<u>0.85</u>
<u>&gt; 0.8</u>	<u>&gt; 0.8</u>	<u>0.85 - 0.05 per each 0.1% over 0.8%</u>



<i>VMA</i>	
<i>Deviation from JMF (± %)</i>	<i>Pay Factor</i>
<i>DENSE GRADED</i>	
$\leq 0.5$	1.05
$> 0.5$ and $\leq 1.0$	1.00
$> 1.0$ and $\leq 1.5$	0.95
$> 1.5$ and $\leq 2.0$	0.90
$> 2.0$ and $\leq 2.5$	0.85
$> 2.5$	0.85 – 0.02 per each 0.1% over 2.5%
<i>OPEN GRADED</i>	
<i>All</i>	1.00

<i>VMA</i>		
<i>DENSE GRADED</i>	<i>OPEN GRADED</i>	<i>PAY FACTOR</i>
<i>Deviation from JMF (± %)</i>	<i>Deviation from JMF (± %)</i>	<i>Pay Factor</i>
$\leq 0.5$		1.05
$> 0.5$ and $\leq 1.0$	<i>All</i>	1.00
$> 1.0$ and $\leq 1.5$		0.95
$> 1.5$ and $\leq 2.0$		0.90
$> 2.0$ and $\leq 2.5$		0.85
$> 2.5$		0.85 – 0.02 per each 0.1% over 2.5%

<i>AIR VOIDS</i>	
<i>Deviation from JMF (± %)</i>	<i>Pay Factor</i>
<i>DENSE GRADED</i>	
$\leq 0.5$	1.05
$> 0.5$ and $\leq 1.0$	1.00
$> 1.0$ and $\leq 1.5$	0.95
$> 1.5$ and $\leq 2.0$	0.85
$> 2.0$	Submitted to the Materials and Tests Division
<i>OPEN GRADED</i>	
$\leq 1.0$	1.05
$> 1.0$ and $\leq 3.0$	1.00
$> 3.0$ and $\leq 3.5$	0.95
$> 3.5$ and $\leq 4.0$	0.85
$> 4.0$	Submitted to the Materials and Tests Division

<u>AIR VOIDS</u>		
<u>DENSE GRADED</u>	<u>OPEN GRADED</u>	<u>PAY FACTOR</u>
<u>Deviation from JMF (± %)</u>	<u>Deviation from JMF (± %)</u>	<u>Pay Factor</u>
<u>≤ 0.5</u>	<u>≤ 1.0</u>	<u>1.05</u>
<u>&gt; 0.5 and ≤ 1.0</u>	<u>&gt; 1.0 and ≤ 3.0</u>	<u>1.00</u>
<u>&gt; 1.0 and ≤ 1.5</u>	<u>&gt; 3.0 and ≤ 3.5</u>	<u>0.95</u>
<u>&gt; 1.5 and ≤ 2.0</u>	<u>&gt; 3.5 and ≤ 4.0</u>	<u>0.85</u>
<u>&gt; 2.0</u>	<u>&gt; 4.0</u>	<u>Submit to Materials and Tests Division*</u>

SECTION 401, BEGIN LINE 1164a, DELETE AND INSERT AS FOLLOWS:

<u>DENSITY</u>		
<u>Percentages are based on %MSG</u>	<u>Pay Factors – Percent</u>	
<u>Dense Graded</u>	<u>Open Graded</u>	
<u>≥ 97.0</u>		<u>Submitted to the Materials and Tests Division*</u>
<u>95.6 - 96.9</u>		<u>1.05 - 0.01 for each 0.1% above <del>95.6</del> 95.5</u>
<u>94.0 - 95.5</u>		<u>1.05</u>
<u>93.1 - 93.9</u>		<u>1.00 + 0.005 for each 0.1% above <del>93.1</del> 93.0</u>
<u>92.0 - 93.0</u>	<u>84.0</u>	<u>1.00</u>
<u>91.0 - 91.9</u>		<u>1.00 - 0.003 for each 0.1% below 92.0</u>
<u>90.0 - 90.9</u>		<u>0.97 - 0.012 for each 0.1% below 91.0</u>
<u>89.0 - 89.9</u>		<u>0.85 - <del>0.015</del> 0.030 for each 0.1% below 90.0</u>
<u>≤ 88.9</u>		<u>Submitted to the Materials and Tests Division*</u>

\* Test results will be considered and adjudicated as a failed material in accordance with normal Department practice as listed in 105.03.

SECTION 401, BEGIN LINE 1183, DELETE AND INSERT AS FOLLOWS:

$N_n$  = number of layers

SECTION 401, AFTER LINE 1200, INSERT AS FOLLOWS:

*The total quality assurance adjustments is to be calculated as follows:*

$$Q = Q_s + (\sum q)$$

where:

- $Q$  = total quality assurance adjustment
- $Q_s$  = quality assurance adjustment for smoothness
- $q$  = subplot quality assurance adjustment

SECTION 401, BEGIN LINE 1233, DELETE AND INSERT AS FOLLOWS:

**401.21 Method of Measurement.** HMA mixtures will be measured by the megagram (ton) of the type specified, in accordance with 109.01(b). The ~~mass (weight)~~ accepted for payment measured quantity will be divided by the MAF to determine the accepted-pay quantity.

SECTION 402, BEGIN LINE 474, INSERT AS FOLLOWS:

PG 64-28\*, PG 70-22, PG 76-22.....902.01(a)

SECTION 402, BEGIN LINE 501, DELETE AND INSERT AS FOLLOWS:

*The MAF equals the Gmm from the mixture design divided by the following: 2.465 for 9.5 mm mixtures and 2.500 for 12.5 mm, 19.0 mm, and 25.0 mm mixtures. If the MAF calculation results in a value where  $0.960 \leq MAF \leq 1.020$ , then the MAF shall be considered to be 1.000. If the calculated MAF is outside of the above range, then the actual calculated value shall be used.*

SECTION 402, BEGIN LINE 537, DELETE AND INSERT AS FOLLOWS:

**(d) Composition Limits for HMA Curbing Mixes.** *The mixture shall be HMA surface type A in accordance with 402 except 402.05 shall not apply and ~~no~~ RAP shall not be used. The binder content shall be 7.0% and the gradations shall meet the following.*

SECTION 402, BEGIN LINE 797, DELETE AND INSERT AS FOLLOWS:

**402.19 Method of Measurement.** *HMA mixtures will be measured by the megagram (ton) of the type specified, in accordance with 109.01(b). The ~~mass (weight) accepted for payment~~ measured quantity will be divided by the MAF to determine the ~~accepted~~ pay quantity.*

SECTION 404, BEGIN LINE 148, DELETE AS FOLLOWS:

**404.06 Preparation of Surface.** *Surfaces to be sealed shall be brought to proper section and grade, compacted, cleaned as required, and approved. ~~Aggregate surfaces to be sealed shall be primed in accordance with 406.~~*

SECTION 408, BEGIN LINE 212, DELETE AND INSERT AS FOLLOWS:

**408.02 Materials.** *Materials shall be in accordance with the following:*

<i>Asphalt Emulsion for</i>	
<i>Crack Sealing, AE-90, AE-90S, AE-150 .....</i>	<i>902.01(b)</i>
<i>Fine Aggregates, No. 23 or 24 .....</i>	<i>904</i>
<i><del>Sealant for Routed Cracks and Joints .....</del></i>	<i><del>ASTM D 3405</del></i>
<i><u>Joint Sealing Materials .....</u></i>	<i><u>906.02</u></i>

SECTION 408, BEGIN LINE 221, DELETE AND INSERT AS FOLLOWS:

**408.03 Equipment.** *A distributor in accordance with 409.03 shall be used when crack sealing and an indirect-heat double boiler kettle with mechanical agitator shall be used when routing and ~~sealing~~ filling. Air compressors shall be capable of producing a minimum air pressure of 690 kPa (100 psi).*

**408.04 Weather Limitations.** *Sealing or filling operations shall not be conducted on a wet surface, when the ambient temperature is below 4°C (40°F), or when other unsuitable conditions exist, unless approved by the Engineer.*

**408.05 Routing and Filling Cracks and Joints.** *Cracks and joints shall be routed when specified, with a vertical-spindle router with carbide-tipped or diamond router bits to form a reservoir not exceeding 13 mm ~~x 13 mm~~ (0.5 in. ~~x 0.5 in.~~) wide with a minimum depth of 19 mm (0.75 in.), when required. The operation shall be coordinated such that routed materials do not encroach on pavement lanes carrying traffic and all routed materials are disposed of in accordance with 104.07. Cracks and joints shall be filled with asphalt rubber to within 7 mm (0.25 in.) of the surface in accordance with the manufacturer's recommendations.*

SECTION 408, BEGIN LINE 250, DELETE AND INSERT AS FOLLOWS:

**408.07 Method of Measurement.** *Sealing and filling of cracks and joints in asphalt pavements will be measured by the megagram (ton) of ~~asphalt~~ material used. Routing of cracks and joints will not be measured.*

SECTION 408, BEGIN LINE 257, DELETE AND INSERT AS FOLLOWS:

**408.08 Basis of Payment.** *Sealing and filling of cracks and joints in asphalt pavements will be paid for by the megagram (ton) of ~~asphalt~~ material used for the type specified.*

SECTION 410, BEGIN LINE 1, DELETE AND INSERT AS FOLLOWS:

**~~SECTION 410 – Blank~~**

**SECTION 410 – QUALITY CONTROL/QUALITY ASSURANCE, QC/QA, HMA SURFACE – SMA PAVEMENT**

**410.01 Description.** *This work shall consist of one course of QC/QA HMA Surface – SMA mixture constructed on prepared foundations in accordance with 105.03.*

**410.02 Quality Control.** *The SMA mixture shall be supplied from a certified HMA plant in accordance with ITM 583; Certified Volumetric Hot Mix Asphalt Producer Program. The QCP shall be modified to include the requirements for the SMA mixtures. The SMA shall be transported and placed according to a Quality Control Plan, QCP, prepared and submitted by the Contractor in accordance with ITM 803; Contractor Quality Control Plans for Hot Mix Asphalt Pavements. The QCP shall be submitted to the Engineer at least 15 days prior to commencing SMA paving operations.*

**MATERIAL**

**410.03 Materials.** *Materials shall be in accordance with the following:*

<i>Asphalt Materials</i>	
<i>PG Binder, PG 76-22, PG 70-22 .....</i>	<i>902.01(a)</i>
<i>Coarse Aggregates, Class AS .....</i>	<i>904</i>
<i>Stabilizing Additive .....</i>	<i>AASHTO MP 8</i>
<i>Fine Aggregates (sand, mineral filler).....</i>	<i>904</i>

**410.04 Design Mix Formula.** A design mix formula, DMF, shall be prepared in accordance with 410.05 and submitted in a format acceptable to the Engineer one week prior to use. The DMF shall state the maximum particle size in the mixture. The DMF shall state the calibration factor, test temperature and absorption factors to be used for the determination of binder content using the ignition oven in accordance with ITM 586, the binder content by extraction in accordance with ITM 571, and a Mixture Adjustment Factor (MAF). The DMF shall state the source, type, dosage rate of any stabilizing additives. Approval of the DMF will be based on the ESAL and mixture designation. A mixture number will be assigned by the Engineer. No mixture will be accepted until the DMF has been approved.

The ESAL category identified in the pay item correlates to the following ESAL ranges:

<i>ESAL CATEGORY</i>	<i>ESAL</i>
1	< 300,000
2	300,000 to < 3,000,000
3	3,000,000 to < 10,000,000
4	10,000,000 to < 30,000,000
5	≥ 30,000,000

**410.05 SMA Mix Design.** The DMF shall be determined for each mixture from a SMA mix design by a design laboratory selected from the Department’s list of Approved Mix Design Laboratories. A SMA mixture shall be designed in accordance with the respective AASHTO references as listed below.

<i>Standard Practice for Designing Stone Matrix Asphalt (SMA) .....</i>	<i>AASHTO PP 41</i>
<i>Standard Practice for Mixture Conditioning of Hot-Mix Asphalt (HMA) .....</i>	<i>AASHTO R 30</i>
<i>Standard Specification for Designing Stone Matrix Asphalt (SMA) .....</i>	<i>AASHTO MP 8</i>
<i>Determining the Plastic Limit and Plasticity Index of Soils .....</i>	<i>AASHTO T 90</i>
<i>Maximum Specific Gravity and Density of Bituminous Paving Mixtures .....</i>	<i>AASHTO T 209</i>
<i>Resistance of Compacted Asphalt Mixture to Moisture Induced Damage .....</i>	<i>AASHTO T 283</i>
<i>Determination of Draindown Characteristics in Uncompacted Asphalt Mixtures .....</i>	<i>AASHTO T 305</i>

*Method for Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyrotory Compactor..... AASHTO T 312*

*Method for Viscosity Determination of Asphalt Binder Using Rotational Viscometer..... AASHTO T 316*

*The single percentage of aggregate passing each required sieve shall be within the limits of the following gradation table.*

<i>SMA Gradation Control Limits (Percent Passing by Volume)</i>				
	<i>Mixture Designation</i>			
	<i>9.5 mm</i>		<i>12.5 mm</i>	
<i>Sieve Size</i>	<i>Lower</i>	<i>Upper</i>	<i>Lower</i>	<i>Upper</i>
<i>25.0 mm</i>				
<i>19.0 mm</i>			<i>100.0</i>	<i>100.0</i>
<i>12.5 mm</i>	<i>100.0</i>	<i>100.0</i>	<i>90.0</i>	<i>99.0</i>
<i>9.5 mm</i>	<i>70.0</i>	<i>95.0</i>	<i>50.0</i>	<i>85.0</i>
<i>4.75 mm</i>	<i>30.0</i>	<i>50.0</i>	<i>20.0</i>	<i>40.0</i>
<i>2.36 mm</i>	<i>20.0</i>	<i>30.0</i>	<i>16.0</i>	<i>28.0</i>
<i>1.18 mm</i>	<i>---</i>	<i>21.0</i>	<i>---</i>	<i>---</i>
<i>600 μm</i>	<i>---</i>	<i>18.0</i>	<i>---</i>	<i>---</i>
<i>300 μm</i>	<i>---</i>	<i>15.0</i>	<i>---</i>	<i>---</i>
<i>75 μm</i>	<i>8.0</i>	<i>12.0</i>	<i>8.0</i>	<i>11.0</i>

*The optimum binder and aggregate gradation content shall produce 4.0% air voids. The maximum specific gravity of the uncompacted mixture shall be determined in accordance with AASHTO T 209. The percent draindown for SMA surface mixture shall not exceed 0.30% in accordance with AASHTO T 305.*

*The MAF equals the Gmm from the mixture design divided by the following: 2.465 for 9.5 mm mixtures and 2.500 for 12.5 mm mixtures. If the MAF calculation results in a value where  $0.980 \leq MAF \leq 1.020$ , then the MAF shall be considered to be 1.000. If the calculated MAF is outside of the above range, then the actual calculated value shall be used.*

*The mixture shall be tested for moisture susceptibility in accordance with AASHTO T 283 except that the loose mixture curing shall be replaced by mixture conditioning for 2 h in accordance with AASHTO R 30. The minimum tensile strength ratio, TSR, shall be 70%. The 150 mm (6 in.) mixture specimens shall be compacted to  $6.0 \pm 1.0\%$  air voids in accordance with AASHTO T 312. Specimens shall be prepared using freeze-thaw preconditioning. If anti-stripping additives are added to the mixture to be in accordance with the minimum TSR requirements, the dosage rate shall be submitted with the DMF.*

*The fine aggregate portion of the aggregate blend shall be non-plastic as determined in accordance with AASHTO T 90.*

*A change in the source or types of aggregates, change in source or type of stabilizing additives, or a change in the source of the specified binder shall require a new DMF. A new DMF shall be submitted to the District Materials and Tests Engineer for approval one week prior to use.*

*The specific gravity of SF and the Gsb of an aggregate blend containing SF may be adjusted once per contract upon notification by the SF source and approval by the District Materials and Tests Engineer. A new DMF is not required for this adjustment.*

*The mixture design compaction temperature for the specimens shall be  $150 \pm 5^{\circ}\text{C}$  ( $300 \pm 9^{\circ}\text{F}$ ).*

<i>VOIDS IN MINERAL AGGREGATE (VMA) CRITERIA</i>	
<i>Mixture Designation</i>	<i>Minimum VMA, Percent</i>
<i>12.5 mm</i>	<i>17.0</i>
<i>9.5 mm</i>	<i>17.0</i>

**410.06 Recycled Materials.** *Mainline surface shall not contain recycled materials.*

**410.07 Lots and Sublots.** *Lots will be defined as 2400 Mg (2400 t) of SMA surface mixture. Lots will be further sub-divided into sublots not to exceed 600 Mg (600 t) of SMA surface mixture. Partial sublots of 100 Mg (100 t) or less will be added to the previous subplot. Partial sublots greater than 100 Mg (100 t) constitute a full subplot.*

**410.08 Job Mix Formula.** *A job mix formula, JMF, shall be developed by a certified HMA producer in accordance with ITM 583. A JMF used for SMA mixture the current or previous calendar year will be allowed. The mixture compaction temperature shall be  $150 \pm 5^{\circ}\text{C}$  ( $300 \pm 9^{\circ}\text{F}$ ). The JMF for each mixture shall be submitted to the Engineer.*

**410.09 Acceptance of Mixtures.** *Acceptance of mixtures for binder content, moisture, and gradation for each lot will be based on tests performed by the Engineer. The Engineer will randomly select the location(s) within each subplot for sampling in accordance with the ITM 802.*

*Samples from each location shall be obtained from each subplot from the pavement in accordance with ITM 580. The second sample shall be located from the random sample by offsetting 0.3 m (1 ft) transversely towards the center of the mat and will be used for the moisture sample. The test results of the sublots will be averaged and shall meet the requirements for tolerances from the JMF for each sieve and binder content.*

The maximum percent of moisture in the mixture shall not exceed 0.10 from plate samples.

The Engineer's acceptance test results for each subplot will be available after the subplot and testing are complete. During the adjustment period the test results will be made available after testing is complete.

ACCEPTANCE TOLERANCE FOR MIXTURES (%Percent Mass)										
MIXTURE	NUMBER OF TESTS	SIEVE SIZE								
					*12.5 mm	*9.5 mm	*4.75 mm	2.36 mm	600 μm	75 μm
SURFACE	1							8.0	4.0	2.5
	2							5.7	2.8	2.1
	3							4.6	2.3	1.8
	4							4.0	2.0	1.5

\* The acceptance tolerance for this sieve shall be the applicable composition limits specified in 410.05.

ACCEPTANCE TOLERANCE FOR BINDER				
Binder Content	Number of Tests			
	1	2	3	4
% Binder	0.7	0.5	0.4	0.3

Acceptance of mixtures for range will be determined using the results of subplot tests performed by the Engineer from each lot. If the range is not in accordance with the requirements, adjustment points will be assessed in accordance with 410.19(a).

ACCEPTANCE TOLERANCE FOR RANGE (± Percent Mass)		
SIEVE SIZE & BINDER CONTENT	PERCENTAGE POINTS	
		SURFACE
2.36 mm		12.0
600 μm		6.0
75 μm		2.0
% BINDER		1.0

Acceptance tolerances for binder content and gradation will be as set out above for the number of tests performed. The acceptance tolerance for range will be as set out above for lots of more than one subplot. The range of binder shall be the difference between the highest subplot binder content and the lowest subplot binder content in one lot. The range of gradation shall be the difference between the highest subplot percent passing and the lowest subplot percent passing each required sieve in one lot.



*Single test values and averages will be reported to the nearest 0.1% except moisture will be reported to the nearest 0.01%. Rounding will be in accordance with 109.01(a).*

*Lot adjustment points will be assessed in accordance with 410.19(a) when the average or range for binder content or gradation are not met.*

*The Contractor may request an appeal of the Engineer's test results in accordance with 410.20.*

*A binder draindown test in accordance with AASHTO T 305 shall be completed once per lot in accordance with 410.07 and shall not exceed 0.30%.*

*Stabilizing additives incorporated into the mixture will be accepted on the basis of a type A certification for the specified material properties for each shipment of fibers. Stabilizing additives from different manufacturers and different types of additives shall not be intermixed.*

*In the event that an acceptance sample is not available to represent a subplot(s), all test results of the previous subplot will be used for acceptance. If the previous subplot is not available, the subsequent subplot will be used for acceptance.*

## **CONSTRUCTION REQUIREMENTS**

**410.10 General.** *Equipment for SMA operations shall be in accordance with 409.*

*Fuel oil, kerosene, or solvents shall not be transported in open containers on equipment. Cleaning of equipment and small tools shall not be accomplished on the pavement or shoulder areas.*

*Segregation, flushing or bleeding of SMA mixtures will not be permitted. Corrective action shall be taken to prevent continuation of these conditions. Segregated, flushed or bleeding of SMA mixtures shall be removed if directed. All areas showing an excess or deficiency of binder shall be removed and replaced.*

*All mixtures that become loose and broken, mixed with dirt, or is in any way defective shall be removed and replaced.*

**410.11 Preparation of Surfaces to be Overlaid.** *Milling of an existing pavement surface shall be in accordance with 202.05. Surfaces on which a mixture is placed shall be free from objectionable or foreign materials at the time of placement.*

*Milled asphalt surfaces and asphalt surfaces shall be tacked in accordance with 406. Contact surfaces of curbing, gutters, manholes, and other structures shall be tacked in accordance with 406.*

**410.12 Process Control.** *The Engineer and Contractor will jointly review the operations to ensure compliance with the QCP. Continuous violations of compliance with the QCP will result in suspension of paving operations.*

**410.13 Weather Limitations.** *SMA courses shall be placed when the ambient temperature and the temperature of the surface on which it is to be placed is 7°C (45°F) or above.*

**410.14 Spreading and Finishing.** *The mixture shall be placed upon an approved surface by means of a paver or other mechanical devices in accordance with 409.03. Mixtures in areas inaccessible to mechanical devices may be placed by other methods.*

*Prior to paving, both the planned quantity and lay rate shall be adjusted by multiplying by the MAF. When mixture is produced from more than one DMF or JMF for a given pay item, the MAF will be applied to the applicable portion of the mixture for each.*

*Planned SMA courses greater than 90 kg/m<sup>2</sup> (165 lb/syd) placed under traffic, shall be brought up even with each adjacent lane at the end of each work day. Planned SMA courses less than or equal to 90 kg/m<sup>2</sup> (165 lb/syd) shall be brought forward concurrently, within practical limits, limiting the work in one lane to not more than one work day of production before moving back to bring forward the adjacent lane.*

*Hydraulic extensions on the paver will not be permitted for continuous paving operations. Fixed extensions or extendable screeds shall be used on courses greater than the nominal width of the paver except in areas where the paving widths vary. Hydraulic extensions may be used in tapers and added lanes less than 75 m (250 ft) in length.*

*Automatic slope and grade controls will be required and shall be outlined in the QCP.*

*SMA mainline and SMA shoulders which are 2.4 m (8.0 ft) or more in width shall be placed with automatic paving equipment.*

*The rollers shall be operated to avoid shoving of the SMA and at speeds not to exceed 4.5 km/h (3 mph). Rollers shall be in accordance with 409.03 (d) 1, 2, or 6. Vibratory rollers meeting the requirements of 409.03(d)1 may be used but shall not be operated in vibratory mode, except the vibratory mode may be used on the first pass to the paver.*

*The finished thickness of any course shall be at least two times but not more than four times the maximum particle size as shown on the DMF.*

**410.15 Joints.** *Longitudinal joints in the surface shall be at the lane lines of the pavement.*

*Transverse joints shall be constructed by exposing a near vertical full depth face of the previous course. For areas inaccessible to rollers, other mechanical devices shall be used to achieve the required density.*

*If constructed under traffic, temporary transverse joints shall be feathered to provide a smooth transition to the driving surface.*

**410.16 Density.** *Acceptance will be based on lots and sublots in accordance with 410.07.*

*The Engineer's acceptance test results for each subplot will be available after the subplot and testing are complete.*

*Sublot and lot density values will be reported to the nearest 0.1%. Rounding will be in accordance with 109.01(a).*

*Density acceptance for all SMA mixtures shall be based on cores cut from the compacted pavement and analysis of pavement samples obtained in accordance with ITM 580. Acceptance will be based on lots and sublots in accordance with 410.07. The Engineer will randomly select two locations in accordance with ITM 802, within each subplot for coring. The transverse core location will be located so that the edge of the core will be no closer than 75 mm (3 in.) from a confined edge or 150 mm (6 in.) from a non-confined edge of the course being placed. The maximum specific gravity will be determined from the sample obtained in 410.09.*

*The Contractor shall obtain cores in the presence of the Engineer with a device that shall produce a uniform 150 mm (6 in.) diameter pavement sample. Surface courses shall be cored within one work day of placement. Damaged core(s) shall be discarded and replaced with a core from a location selected by adding 0.3 m (1.0 ft) to the longitudinal location of the damaged core using the same transverse offset.*

*The Contractor and the Engineer shall mark the core to define the course to be tested. If the core indicates a course thickness of less than 2.0 times the maximum particle size, the core will be discarded and a core from a new random location will be selected for testing.*

*The Engineer will take immediate possession of the cores. If the Engineer's cores are subsequently damaged, additional coring within a specific subplot or sublots will be the responsibility of the Department. Subsequent core locations will be determined by subtracting 0.3 m (1.0 ft) from the random location using the same transverse offset.*

*The density of the mixture will be expressed as the percentage of maximum specific gravity (%MSG) obtained by dividing the average bulk specific gravity by the maximum specific gravity for the subplot, times 100. The Engineer will determine the BSG of the cores in accordance with AASHTO T 166. The maximum specific gravity will be determined in accordance with AASHTO T 209 from plant produced materials prepared in accordance with ITM 572. The target value for density of SMA mixtures of each subplot shall be 93.0%.*

*The densities of the sublots will be averaged to determine the density of the lot.*

*Within one work day of coring operations the Contractor shall clean, dry, and refill the core holes with SMA of similar or smaller size particles or other approved materials. The Contractor's plan for refilling core holes shall be outlined in the QCP.*

**410.17 Shoulder Corrugations.** *Shoulder corrugations shall be in accordance with 606.*

**410.18 Pavement Smoothness.** *The pavement smoothness will be evaluated and determined in accordance with 401.18.*

**410.19 Adjustment Points.** *When test results for mixture properties or density exceed the allowable tolerances, adjustment points will be assessed. The adjustment points will be used to calculate a quality assurance adjustment quantity (q) for the lot. Quality assurance adjustment points for smoothness will be in accordance with 401.19(c).*

*The adjustment for mixture properties and density are calculated as follows.*

$$q = (L \times U \times P/100)/MAF$$

*where:*

- q = quality assurance adjustment quantity*
- L = lot quantity*
- U = unit price for the material, \$/Mg (\$/TON)*
- P = total adjustment points*

*The total quality assurance adjustments is to be calculated as follows:*

$$Q = Q_s + \sum (q_m + q_d)$$

*where:*

- Q = total quality assurance adjustment quantity*
- Q<sub>s</sub> = quality assurance adjustment for smoothness as calculated in 401.19(c)*
- q<sub>m</sub> = lot adjustments for mixtures*
- q<sub>d</sub> = lot adjustments for density*

*If the total adjustment points for a lot are greater than 15, the pavement will be evaluated by the Materials and Tests Division. If the Contractor is not required to remove the mixture, quality assurance adjustments of the lot will be assessed or other corrective actions as determined by the Materials and Tests Division.*

**(a) Mixture.** *When test results for the mixture furnished exceed the allowable tolerances, adjustment points will be assessed as follows:*

<i>ADJUSTMENT POINTS FOR GRADATION</i>									
<i>Adjustment Points</i>	<i>SIEVE SIZE</i>								
				<i>12.5 mm</i>	<i>9.5 mm</i>	<i>4.75 mm</i>	<i>2.36 mm</i>	<i>600 <math>\Phi</math>m</i>	<i>75 <math>\Phi</math>m</i>
<i>For Each 0.1% up to 1.0% Out Of Tolerance</i>				<i>0.1</i>	<i>0.1</i>	<i>0.1</i>	<i>0.1</i>	<i>0.2</i>	<i>0.3</i>
<i>For Each 0.1% &gt; 1.0% Out of Tolerance</i>				<i>0.1</i>	<i>0.1</i>	<i>0.1</i>	<i>0.2</i>	<i>0.3</i>	<i>0.6</i>

*Gradation adjustment points for the lot shall be the sum of points calculated for up to 1% out of tolerance and the points calculated for greater than 1% out of tolerance in accordance with 410.09.*

*Binder content adjustment points for the lot shall be two points for each 0.1% above the tolerance or four points for each 0.1% below the tolerance in accordance with 410.09.*

*When test results for the mixture furnished exceed the allowable range in accordance with 410.09, adjustment points will be assessed as follows:*

<i>ADJUSTMENT POINTS FOR RANGE</i>	
<i>Sieve Size and Binder Content</i>	<i>Adjustment Points (For Each 0.1% Out Of Range)</i>
<i>2.36 mm</i>	<i>0.1</i>
<i>600 <math>\mu</math>m</i>	<i>0.1</i>
<i>75 <math>\mu</math>m</i>	<i>0.1</i>
<i>% Binder</i>	<i>1.0</i>

*For mixtures produced during a certified HMA plant's adjustment period, adjustment points will not be assessed if the mixture produced is in accordance with the following.*

- 1. The gradation complies with 410.05 with the allowable tolerance limits shown in 410.09.*
- 2. The range for the binder content and gradation do not exceed the limits shown in 410.09.*
- 3. The binder content is within the tolerance requirements of 410.09.*

*If the mixture is not in accordance with these requirements, adjustment points will be assessed in accordance with 410.09 for variations exceeding the requirements shown above.*

**(b) Density.** When the density of the lot is outside the allowable tolerances, adjustment points will be assessed as follows:

<i>DENSITY</i>	
<i>Percentages are based on %MSG</i>	<i>Pay Adjustments– Percent</i>
<i>&gt; 97.0</i>	<i>Submitted to the Materials and Tests Division *</i>
<i>93.0 – 97.0</i>	<i>0.00</i>
<i>92.0 – 92.9</i>	<i>0.20 points for each 0.10 % below 93.0</i>
<i>91.0 – 91.9</i>	<i>2.00 + 0.40 points for each 0.10 % below 92.0</i>
<i>89.0 – 90.9</i>	<i>6.00 + 1.00 points for each 0.10 % below 91.0</i>
<i>≤89.0</i>	<i>Submitted to the Materials and Tests Division *</i>

*\* Test results will be considered and adjudicated as a failed material in accordance with normal Department practice as listed in 105.03.*

**410.20 Appeals.** If the QC test results do not agree with the acceptance test results, a request, along with the QC test results, may be made in writing for additional testing. The basis of the appeal shall include applicable QC test results showing acceptable quality results and shall be submitted within seven calendar days of receipt of the Department's written results for that subplot. Acceptable QC test results are defined as QC test results resulting in less pay adjustment to the contract than that determined by the Department. If an appeal is granted, appeal cores shall be taken within seven calendar days after written notification unless otherwise directed. Within one work day of appeal coring operations the Contractor shall clean, dry, and refill the core holes with SMA or HMA surface materials.

The results of the appeal cores will replace the initial test results for a subplot(s) or lot and be used as the basis for acceptance.

**(a) Mixture.** Upon approval for the additional testing, the Contractor shall take cores in accordance with ITM 580. The core location will be within 0.3 m (1.0 ft) longitudinally of the sample tested using the same transverse offset.

**(b) Density.** Additional core locations will be determined by adding 0.3 m (1.0 ft) longitudinally of the cores tested using the same transverse offset. Each subplot density will be calculated using the average bulk specific gravity of the cores obtained for that subplot and the average MSG of the lot.

**410.21 Method of Measurement.** SMA mixtures will be measured by the megagram (ton) of the type specified, in accordance with 109.01(b). The measured quantity will be divided by the MAF to determine the pay quantity.

**410.22 Basis of Payment.** The accepted quantities for this work will be paid for at the contract unit price per megagram (ton) for QC/QA-HMA, of the type specified, – SMA, complete in place.

*Payment for furnishing, calibrating, and operating the profilograph, and furnishing profile information will be made in accordance with 401.22.*

*Adjustments to the contract payment with respect to mixture, density, and smoothness for mixture produced will be included in a quality assurance adjustment pay item. The unit price for this pay item will be one dollar (\$1.00) and the quantity will be in units of dollars. The quantity is the total calculated in accordance with 410.19. An extra work order developed in accordance with 109.05 will be prepared to reflect contract adjustments.*

*Payment will be made under:*

<b>Pay Item</b>	<b>Metric Pay Unit Symbol (English Pay Unit Symbol)</b>
QC/QA HMA, _____, _____, _____ (ESAL <sup>(1)</sup> ) (PG <sup>(2)</sup> ) (Course <sup>(3)</sup> ) (Mix <sup>(4)</sup> )	mm – SMA ..... Mg (TON)
Quality Assurance Adjustment.....	DOL
(1) ESAL Category as defined in 410.04	
(2) Number represents the high temperature binder grade. Low temperature grades are –22.	
(3) Surface,	
(4) Mixture Designation	

*Preparation of surfaces to be overlaid shall be included in the cost of other pay items within this section.*

*Coring and refilling of the pavement holes shall be included in the cost of other pay items within this section.*

*No payments will be made for additional anti-stripping additives, appeal coring or related traffic control expenditures for coring operations.*

*Corrections for pavement smoothness shall be included in the cost of other pay items within this section.*

*The price for profilograph, HMA will be full compensation regardless of how often the profilograph is used or how many profilograms are produced.*

SECTION 610, BEGIN LINE 22, DELETE AND INSERT AS FOLLOWS:

**610.03 General Requirements.** ~~Except as otherwise herein provided, subgrade~~  
~~Subgrade~~ for approaches shall be prepared in accordance with 207.04. Aggregate base shall be constructed in accordance with 301. HMA for approaches shall be constructed in accordance with 402. HMA mixture for approaches shall be HMA surface or intermediate, type A, B, ~~C~~, C or D in accordance with 402.04. A MAF in accordance with 402.04 will not apply.

*Dense graded subbase shall be constructed in accordance with 302. PCCP for approaches shall be constructed in accordance with 502.*

SECTION 718, BEGIN LINE 155, DELETE AND INSERT AS FOLLOWS:

*The mixture for HMA for underdrains shall be Intermediate ~~OG 19.0~~ OG 19.0 mm in accordance with 401. An ESAL Category 5 in accordance with 401.04 and a PG Binder 76-22 shall be used. A MAF in accordance with 401.05 will not apply. Acceptance of the HMA for underdrains will be in accordance with 402.09.*

SECTION 718, BEGIN LINE 162, INSERT AS FOLLOWS:

**718.03 Pipe Installation.** *Trenches shall be excavated to the dimensions and grade shown on the plans. Pipes shall be secured to ensure that the required grade and horizontal alignment of the pipe are maintained. Perforated pipe shall be placed with the perforations down. The pipe sections shall be joined securely with the appropriate couplings, fittings, or bands. Aggregate for underdrains shall be placed in a manner which minimizes aggregate contamination. HMA for underdrains shall be placed and compacted separately from mainline mixtures. HMA for underdrains may be placed in one lift and shall be compacted with equipment in accordance with 409.03(d).*

SECTION 718, BEGIN LINE 172, INSERT AS FOLLOWS:

**718.04 Geotextile.** *Storage and handling of geotextiles shall be in accordance with the manufacturer's recommendations. Each geotextile roll shall be labeled or tagged. Damaged or defective geotextile shall be replaced as directed. The geotextile shall be placed loosely, but with no wrinkles or folds. The ends of subsequent rolls of geotextile shall be overlapped a minimum of 0.3 m (1.0 ft). The upstream geotextile shall overlap the downstream geotextile. Placement of aggregate shall proceed following placement of the geotextile. HMA for underdrains shall be placed and compacted separately from mainline mixtures. HMA for underdrains may be placed in one lift and shall be compacted with equipment in accordance with 409.03(d).*

#### PATCHING

Quantities specified for additional patching operations are undistributed quantities. State personnel will determine the location of additional operations at the time of construction.

#### CEMENTS

The Standard Specifications are revised as follows:

SECTION 702, BEGIN LINE 64, DELETE AND INSERT AS FOLLOWS:

The relative yield of the concrete shall be determined in accordance with ~~501.03(a)~~ 505. The concrete when produced shall provide a relative yield of  $1.00 \pm 0.02$ . When the relative yield is outside the tolerances, adjustments to the batch weights shall be made. The minimum amount of cement shall be used for the desired class of concrete. The cement content shall not be increased more than  $36 \text{ kg/m}^3$  (60 lb/cu yd). The relative yield of the concrete shall be maintained as stated above. If ~~portland pozzolan cement, type IP; or air-entrained portland pozzolan cement, type IP-A;~~ *cements* are to be used in the structural concrete, the cement content shall be increased by a multiplier of 1.06 times the minimum amount of cement required or the desired increased cement content for the specified class of concrete (i.e.,  $1.06 \times 335 = 355$  kilograms per cubic meter ( $1.06 \times 564 = 598$  lb/cu yd) for class A concrete).



Fly ash from an approved source may be used as a partial replacement for Portland cement. The substitution of fly ash for portland cement will not be permitted in conjunction with the use of blended portland cement ~~types, IP, IPA, IS, and ISA~~ nor ground granulated blast furnace slag. Mix designs will be based on using a maximum 20% cement reduction with a minimum 1.25 to 1 ash-to-cement replacement ratio by weight.

Ground granulated blast furnace slag from an approved source may be used as a partial replacement for portland cement. The substitution of ground granulated blast furnace slag for portland cement will not be permitted in conjunction with the use of blended portland cement ~~types, IP, IPA, IS, and ISA~~, nor fly ash. Mix designs will be based on using a maximum 30% cement substitution with a 1:1 slag-to-cement ratio, by weight.

~~Portland Blended portland~~ pozzolan cements, ~~type IP~~, fly ash, and ground granulated blast furnace slag used as a pozzolan may only be used in concrete bridge decks between April 1 and October 15 of the same calendar year.

---

#### DRAINAGE STRUCTURES

Construction of all new inlets involving existing structures shall be accomplished such that the existing pipe structure shall not be damaged.

Where a new casting is to be fitted to an existing catch basin or an existing casting is to be fitted to a new inlet, all dimensions and conditions shall be checked in the field. The Contractor shall assume responsibility for their correctness and fit.

The costs of the removal of headwalls and cleanup of the existing pipe shall be included in the costs of the pay items for the new drainage structures.

All existing structures damaged during construction shall be replaced with no additional payment.

---

#### MONUMENT, SECTION CORNER

Before re-establishing monuments, contact Jeff Harvey at the Miami County Surveyor's office, 25 N. Broadway Street, Courthouse, Peru, IN 46970 or call 765-472-3901.

---

## CERTIFICATION OF TEMPORARY TRAFFIC CONTROL DEVICES

## Category 1 Devices

The Contractor shall certify that the following temporary traffic control devices to be used do not exceed the maximum values shown in the table below, and are considered crashworthy at Test Level 3 in accordance with National Cooperative Highway Research Program Report No. 350.

Device	Composition	Maximum Mass (Weight)	Maximum Height
Single Piece Traffic cones	Rubber	9 kg (20 lb)	920 mm (36 in.)
	Plastic	9 kg (20 lb)	1220 mm (48 in.)
Tubular Markers	Rubber	6 kg (13 lb)	920 mm (36 in.)
	Plastic	6 kg (13 lb)	920 mm (36 in.)
Single Piece Drums	High Density Plastic	35 kg (77 lb)	920 mm (36 in.)
	Low Density Plastic	35 kg (77 lb)	920 mm (36 in.)
Delineators	Plastic, Fiberglass	N/A	1220 mm (48 in.)

No lights, signs, flags, or other auxiliary attachments are included in the mass (weight) of the devices listed above. Reflective sheeting or reflective buttons are included on delineators. Maximum masses (weights), including ballast, do not exceed the values shown in the table. "Single piece" refers to the construction of the body of the drum exclusive of a separate base, if any.

Type A or type C warning lights in accordance with the following specifications will be allowed on drums if they are firmly attached with vandal resistant 13 mm (1/2 in.) diameter by 95 mm (4 in.) cadmium plated steel bolt with nut and a 38 mm (1 1/2 in. high cup washer.

1. The mass (weight) shall be no more than 2.4 kg (5 lb).
2. The lens diameter shall be 180 to 200 mm (7 to 8 in.)
3. The height of the light shall be 270 to 340 mm (11 to 14 in.)

## Category II Devices

Category II temporary traffic control devices include type III barricades, vertical panels, portable sign standards, and other light-weight traffic control devices.

Category II temporary traffic control devices shall be in accordance with the NCHRP Report 350, test level 3.

A form will be provided at the pre-construction conference for the Contractor to complete and return to the Engineer prior to the placement of category I or II traffic control devices.

---

---

MAINTAINING TRAFFIC FOR MAINTENANCE OR RESURFACE WORK

The Standard Specifications are revised as follows:

SECTION 801, AFTER LINE 113, INSERT AS FOLLOWS:

*Traffic shall be maintained for maintenance activities or for HMA resurface work as shown on the plans or as described herein. The Contractor shall have an extra set of construction signs and an extra flashing arrow sign on the project site so that the taper may be moved forward without suspending the operations and clearing the work area. Additional traffic control devices shall be furnished for situations determined to be more complex, for protection in hazardous areas, and when traffic conditions warrant.*

*All nonfixed signs shall be removed at the completion of each day's operations. All lanes shall be open to normal traffic during hours other than daylight hours. If a traffic lane is directed to remain closed during hours other than daylight hours, traffic shall be maintained on the remaining lanes as shown on the plans.*

*All fixed signs shall remain in place until all temporary pavement markings have been removed. Work days will not be charged from the time of completion of other work until the markings have been removed.*

---

---

TREATMENT OF SIGNAL DETECTOR HOUSINGS

The existing aluminum detector housing shall be removed, and the concrete housing the detector shall be removed one foot below original grade (paid for with the item "Detector Housing, Remove"). A new aluminum housing will be installed to the existing conduit and adjusted to meet the new roadway surface elevation. New concrete will then be placed around the new aluminum housing to meet the original detector housing dimensions on standard sheet 805-SGDH-01 (paid for with the item "Signal Detector Housing").

---

---

TRAFFIC VEHICLE DETECTION LOOP SHAPE

The Specifications are revised as follows:

SECTION 805, BEGIN LINE 261, INSERT AS FOLLOWS:

Loops shall be of a regular octagon shape with side of 0.75 m (2.5 ft) in length *or a circular shape with a 1.83 m (6 ft) diameter*. An outline shall be laid out and painted where the loops shall be sawed. The loop locations shall be subject to the review and approval of the District Traffic Engineer. The District Traffic Engineer shall be notified 48 h prior to such field review.

DOCUMENTATION, REMOVAL, AND REINSTALLATION  
OF EXISTING PAVEMENT MARKINGS

Prior to any pavement surface removal, overlay, or other disturbance, the Contractor shall document all existing pavement markings with sufficiently detailed information to insure the reinstallation of all markings in the same patterns and spacings. The documentation method may be by drawings, videotapes, or other approved methods. The completion of the documentation shall be verified with the Engineer prior to any road surface activities which might damage or destroy the existing pavement markings.

The District Traffic Section will be informed five days in advance of any reinstallation of permanent pavement markings to coordinate a review of the documentation and verify any needed changes to the pavement markings.

Documentation of existing pavement markings shall not be measured for payment. The cost of the work shall be included in the cost of the pavement marking items.

DURABLE PAVEMENT MARKING MATERIAL FOR EXPOXY  
LONGITUDINAL AND TRANSVERSE MARKINGS

The Standard Specifications are revised as follows:

SECTION 808, BEGIN LINE 222, DELETE AND INSERT AS FOLLOWS:

**a. Application.** Epoxy ~~and beads shall be used as~~ shall be used on Portland cement concrete pavement unless otherwise specified or directed. This material shall be applied ~~only when the pavement temperature is 5°C (40° F) or above in accordance with the manufacturer's recommendations. The pavement surface shall be sand or shot blast to remove concrete curing agent prior to epoxy application.~~ The wet film thickness of the epoxy marking material shall be a minimum of ~~380 um (15 mils)~~ 635 um (25 mils). Immediately following the application of the epoxy markings, additional reflectorization shall be provided by applying *a double drop of glass beads* to the surface of the wet marking at a uniform rate of ~~9.8 kg/10m<sup>2</sup> (20 lb/100sq ft)~~ 1.4 kg/L (12 lb/Gal) of marking *for large glass beads and 1.4 kg/L (12 lb/Gal) of marking for small glass beads.*

**b. Equipment.** The machine used to apply the epoxy marking material shall precisely meter the two components, produce and maintain the necessary mixing head temperature within the required tolerances, all in accordance with the manufacturer's recommendations. The machine shall be equipped with ~~a high pressure water blast device ahead of~~ a high pressure air blast device, both as an integral part of the gun carriage, for cleaning the pavement ahead of the marking application. The machine shall also be equipped with the following: a guide pointer to keep the machine on an accurate lien; at least two spray guns which can be operated individually or simultaneously; an automatic device which will provide a broken line of the required length; and automatic glass bead dispensers which is synchronized with the marking application.



**Table 1**  
*Minimum Retained Reflectance\**

	<u>White</u>	-	<u>Yellow</u>
<i>Entrance Angle</i>	86.58	-	86.58
<i>Observation Angle</i>	1.08	-	1.08
<i>Specific Luminance (SL) [(mcd•ft<sup>2</sup>) •fc<sup>-1</sup>]</i>	100	-	100

*\*All reflectance measurements shall be made using as "ECOLUX" Retroreflectometer.*

SNOWPLOWABLE RAISED PAVEMENT MARKERS

Snowplowable raised pavement markers manufactured by the following companies will be considered approved to meet the requirements of this contract. The slots cut in the pavement shall be in accordance with the manufacturer's recommendations.

Stimsonite Corporation  
6565 W. Howard Street  
Niles, Illinois 60714

Models detailed on  
Standard Sheets 808-MKRM-10  
or 808-MKRM-11

Hallen Products Ltd.  
39960 N. Millcreek Rd.  
Wadsworth, Illinois 60083.

Iron Star Model 664H

REMOVAL OF SNOWPLOWABLE RAISED PAVEMENT MARKERS

The Standard Specifications are revised as follows:

SECTION 808, BEGIN LINE 404, DELETE AND INSERT AS FOLLOWS:

Removed markers shall ~~remain~~ *become* the property of the ~~Department unless otherwise specified~~ *Contractor and removed from the jobsite prior to the completion of the work.*

SECTION 808, BEGIN LINE 407, DELETE AS FOLLOWS:

~~Removed snowplowable raised pavement markers shall be delivered to the District Traffic Division. The markers shall be delivered in 210 L (55 gal.) metal containers with lids which may be sealed. The metal containers shall be furnished either by the Contractor or by the District Traffic Division as specified in the contract. Approximately 50 markers shall be placed in each container. Each container shall be labeled as to how many markers it contains.~~

~~All metal containers used for delivering removed markers will remain the property of the Department when no longer required for the contract.~~

SECTION 808, BEGIN LINE 512, DELETE AS FOLLOWS:

~~The cost of metal containers for disposal of removed snowplowable raised pavement markers, if furnished by the Contractor, shall be included in the costs of other pay items. The cost of picking up and returning such metal containers, if furnished by the District Traffic Division, shall be included in the costs of other pay items.~~

~~The cost of delivering removed and packaged snowplowable raised pavement markers to the designated location shall be included in the cost of transportation of salvageable materials.~~

---

AGGREGATES

The Supplements to the Standard Specifications are revised as follows:

SECTION 904, BEGIN LINE 453, DELETE AND INSERT AS FOLLOWS:

*Aggregates, except those used for precast concrete units or fine aggregates used for snow and ice abrasive, shall be supplied by a Certified Aggregate Producer in accordance with 917. Structure backfill may be obtained from a non-CAPP source in accordance with 211.02. SF for SMA mixtures shall also require the following.*

- (a) Specific gravity quality control tests shall be completed at a frequency of one test per 2000 Mg (ton) produced.*
- (b) Target bulk specific gravity shall be established using the average of the first four tests.*
- (c) Subsequent individual tests shall be within 0.050 of the target bulk specific gravity.*
- (d) Moving average of four consecutive tests shall be within 0.040 of the target bulk specific gravity.*
- (e) Tests outside these ranges shall require the material to be isolated from the approved stockpile until action has been taken to eliminate the cause of the nonconformity. Any nonconforming test shall be followed immediately by a corrective action. Corrective actions shall include, but are not limited to, investigation for assignable cause, correction of known assignable cause, and retesting.*
- (f) If it is determined that a new target is necessary, a request shall be made in writing to the District Materials and Tests Engineer to establish the new target.*

*Dolomite aggregates are defined as carbonate rock containing at least 10.3% elemental magnesium when tested in accordance with ITM 205.*

*Polish resistant aggregates are defined as those aggregates in accordance with ITM 214. Aggregates meeting these requirements will be maintained on the Department's list of approved Polish Resistant Aggregates.*

*Sandstone aggregates shall only be used in HMA surface or SMA surface mixtures. Sandstone aggregates are defined as a sedimentary rock composed of siliceous sandgrains containing quartz, chert, and quartzose rock fragments in a carbonate matrix or cemented with silica, calcite, or dolomite. The Materials and Tests Division will determine identification of sandstone.*

*Steel furnace (SF) slag shall only be used in aggregate shoulders, HMA surface or SMA surface mixtures, dumped riprap, and snow and ice abrasives.*

SECTION 904, BEGIN LINE 493a, INSERT AS FOLLOWS:

<i>Characteristic</i>	<i>PCC</i>	<i>HMA</i>	<i>SMA</i>
<i>Physical</i>			
<i>Organic Impurities, AASHTO T 21, lighter than or equal to, Color Standard (Note 1) .....</i>	<i>3</i>		
<i>Acid Insoluble, ITM 202 (Note 2) .....</i>		<i>40</i>	
<i>Soundness</i>			
<i>Freeze and Thaw, AASHTO T 103, Method A, % Max. (Note 3) .....</i>	<i>10.0%</i>	<i>10.0%</i>	<i>10.0%</i>
<i>Brine Freeze-and-Thaw, ITM 209, % Max. (Note 3) .....</i>	<i>12.0%</i>	<i>12.0%</i>	<i>12.0%</i>
<i>Sodium Sulfate Soundness, AASHTO T 104, % Max. (Note 3) .....</i>	<i>10.0%</i>	<i>10.0%</i>	<i>10.0%</i>

- NOTES: 1. When subjected to the colorimetric test for organic impurities and a color darker than the standard is produced, it shall be tested for effect of organic impurities on strength of mortar in accordance with AASHTO T 71. If the relative strength at seven days is less than 95% it shall be rejected.  
 2. For ACBF or GBF slag sands, the minimum acid insoluble content shall be 25%. Acid insoluble requirements shall not apply to crushed limestone or dolomite sands.  
 3. AASHTO T 104 and ITM 209 may be run at the option of the Engineer, in-lieu of AASHTO T 103.

SECTION 904, BEGIN LINE 493a, INSERT AS FOLLOWS:

<i>Characteristic</i>	<i>PCC</i>	<i>HMA</i>	<i>SMA</i>
<i>Physical</i>			
<i>Organic Impurities, AASHTO T 21, lighter than or equal to, Color Standard (Note 1) .....</i>	<i>3</i>		
<i>Acid Insoluble, ITM 202 (Note 2) .....</i>		<i>40</i>	
<i>Soundness</i>			
<i>Freeze and Thaw, AASHTO T 103, Method A, % Max. (Note 3) .....</i>	<i>10.0%</i>	<i>10.0%</i>	<i>10.0%</i>
<i>Brine Freeze-and-Thaw, ITM 209, % Max. (Note 3) .....</i>	<i>12.0%</i>	<i>12.0%</i>	<i>12.0%</i>
<i>Sodium Sulfate Soundness, AASHTO T 104, % Max. (Note 3) .....</i>	<i>10.0%</i>	<i>10.0%</i>	<i>10.0%</i>

- NOTES: 1. When subjected to the colorimetric test for organic impurities and a color darker than the standard is produced, it shall be tested for effect of organic impurities on strength of mortar in accordance with AASHTO T 71. If the relative strength at seven days is less than 95% it shall be rejected.  
 2. For ACBF or GBF slag sands, the minimum acid insoluble content shall be 25%. Acid insoluble requirements shall not apply to crushed limestone or dolomite sands.  
 3. AASHTO T 104 and ITM 209 may be run at the option of the Engineer, in-lieu of AASHTO T 103.



SECTION 904, BEGIN LINE 539, DELETE AND INSERT AS FOLLOWS:

**(c) For SMA Mixtures.** Fine aggregate for SMA shall be limestone, dolomite, crushed gravel, SF, or ACBF. SF sand may be used only when the coarse aggregate is SF. Crushed gravels shall have a minimum fine aggregate angularity of 45 in accordance with AASHTO T 304 Method A. Fine aggregates shall be non-plastic in accordance with AASHTO T 90.

**(e d) For Pneumatically Placed Mortar.** Fine aggregate shall be natural sand suitable for use with a pneumatic cement gun. Fine aggregate shall be size No. 15, or size PP in accordance with 904.02(~~g~~ h), or an approved gradation from a CAPP source.

**(d e) Mortar Sand.** Fine aggregate for mortar shall consist of uniformly graded natural sand in accordance with gradation requirements of 904.02(~~g~~ h) for size No. 15 or an approved gradation from a CAPP source.

**(e f) Blank Mineral Filler for SMA.** Mineral filler shall consist of dust produced by crushing stone, portland cement, or other inert mineral matter having similar characteristics. Mineral filler shall be in accordance with the gradation requirements of 904.02(h) for size No. 16. Mineral filler shall be in accordance with ITM 203 or from an ABF slag source. The sieve analysis of mineral filler shall be conducted in accordance with AASHTO T 37 except as noted in 904.06. Mineral filler shall be non-plastic in accordance with AASHTO T 90.

**(f g) Snow and Ice Abrasives.** Snow and ice abrasives shall be fine aggregates or cinders in accordance with the gradation requirements of 904.02(~~g~~ h) for size S&I.

When steel slag is used as snow and ice abrasives, and payment is on a tonnage basis, the pay quantity shall be adjusted in accordance with 904.01.

**(g h) Sizes of Fine Aggregates.**

Sieve Sizes	SIZES (PERCENT PASSING)					
	23 Note 1	24 Note 1	15 Note 1	16	PP	S&I
9.5 mm (3/8 in.)	100	100				100
4.75 mm (No. 4)	95- 100	95- 100			100	
3.35 mm (No. 6)			100			
2.36 mm (No. 8)	80- 100	70- 100	90- 100		85- 95	
1.18 mm (No. 16)	50-85	40-80				
600 µm (No. 30)	25-60	20-60	50-75	100	50- 65	
300 µm (No. 50)	5-30	7-40	15-40		15- 25	0- 30
180 µm (No. 80)				95- 100		
150 µm (No. 100)	0-10	1-20	0-10		0-10	
75 µm (No. 200)	0-3	0-6	0-3	65- 100		0-7

Note 1: The fine aggregate shall have not more than 45% retained between any 2 consecutive sieves.

**(h i) Sampling and Testing.** Sampling and testing shall be conducted in accordance with the following AASHTO and ITMs:

- Acid Insoluble Content.....ITM 202
  - \*Amount of Material Finer than  
75 µm (No. 200) sieve..... AASHTO T 11
  - Brine Freeze-and-Thaw Soundness .....ITM 209
  - Control Procedures for Classification of Aggregates .....ITM 203
  - Determining the Plastic Limit and Plasticity Index  
of Soils..... AASHTO T 90
  - Mortar Strength ..... AASHTO T 71
  - Organic Impurities..... AASHTO T 21
  - Sampling Aggregates ..... AASHTO T 2
  - Sampling Stockpiled Aggregates.....ITM 207
  - \*Sieve Analysis of Aggregate..... AASHTO T 27
  - \*Sieve Analysis of Mineral Filler ..... AASHTO T 37
  - \*Soundness..... AASHTO T 103, T 104
  - Specific Gravity and Absorption, Fine Aggregate..... AASHTO T 84
- \*Except as noted in 904.06.

SECTION 904, BEGIN LINE 589a, INSERT AS FOLLOWS:

Characteristic Classes	AP	AS	A	B	C	D	E	F
<b>Quality Requirements</b>								
Freeze-and-Thaw Beam Expansion, % Max. (Note 1) .....	.060							
Los Angeles Abrasion, %, Max (Note 2) .....	40.0	<u>30.0</u>	40.0	40.0	45.0	45.0	50.0	
Sodium Sulfate Soundness, %, Max. (Note 3) .....	12.0	<u>12.0</u>	12.0	12.0	16.0	16.0	20.0	25.0
Brine Freeze-and-Thaw Soundness, % Max. (Note 4) .....	30	<u>30</u>	30	30	40	40	50	60
Absorption, %, Max.(Note 5) .....	5.0	<u>5.0</u>	5.0	5.0	5.0			
<b>Additional Requirements</b>								
Deleterious, %, Max.								
Clay Lumps and Friable Particles .....	1.0	<u>1.0</u>	1.0	1.0	2.0	4.0		
Non-Durable (Note 6) .....	4.0	<u>4.0</u>	4.0	4.0	6.0	8.0		
Coke .....					(See Note 7)	(See Note 7)		
Iron.....	3.0	<u>3.0</u>	3.0	5.0	8.0	10.0		
Chert (Note 8) .....	1200		1200	1200	1120	1120	1120	
Mass Per Cubic Meter for Slag, kg ...								
Weight Per Cubic Foot for Slag,(lbs), Min .....	(75.0)		(75.0)	(75.0)	(70.0)	(70.0)	(70.0)	
Crushed Particles, %, Min. (Note 9)								
Asphalt Seal Coats.....			70.0	70.0				
Compacted Aggregates .....			20.0	20.0	20.0	20.0		

- NOTES: 1. Freeze-and-thaw beam expansion shall be tested and retested in accordance with ITM 210.  
 2. Los Angeles abrasion requirements shall not apply to BF.  
 3. Aggregates may, at the option of the Engineer, be subjected to 50 cycles of freezing and thawing in accordance with AASHTO T 103, Procedure A, and may be accepted, provided they do not have a loss greater than specified for Sodium Sulfate Soundness.

4. Brine freeze-and-thaw soundness requirements are subject to the conditions stated in Note 3.
5. Absorption requirements apply only to aggregates used in PCC and HMA mixtures except they shall not apply to BF. When crushed stone coarse aggregates from Category I sources consist of production from ledges whose absorptions differ by more than two percentage points, the absorption test will be performed every three months on each size of material proposed for use in PCC or HMA mixtures. Materials having absorption values between 5.0 and 6.0 that pass AP testing may be used in PCC. If variations in absorption preclude satisfactory production of PCC or HMA mixtures, independent stockpiles of materials will be sampled, tested, and approved prior to use.
6. Non-durable particles include soft particles as determined by ITM 206 and other particles which are structurally weak, such as soft sandstone, shale, limonite concretions, coal, weathered schist, cemented gravel, ocher, shells, wood, or other objectionable material. Determination of non-durable particles shall be made from the total mass (weight) of material retained on the 9.5 mm (3/8 in.) sieve. Scratch Hardness Test shall not apply to crushed stone coarse aggregate.
7. ACBF and SF coarse aggregate shall be free of objectionable amounts of coke, ~~and~~ iron, and lime agglomerates.
8. The bulk specific gravity of chert shall be based on the saturated surface dry condition. The amount of chert less than 2.45 bulk specific gravity shall be determined on the total mass (weight) of material retained on the 9.5 mm (3/8 in.) sieve for sizes 2 through 8, 43, 53, and 73, and on the total mass (weight) of material retained on the 4.75 mm (No. 4) sieve for sizes 9, 11, 12, and 91.
9. Crushed particle requirements apply to gravel coarse aggregates used in compacted aggregates, and seal coats except seal coats used on shoulders. Determination of crushed particles shall be made from the weight (mass) of material retained on the 4.75 mm (No. 4) sieve in accordance with ASTM D 5821.

SECTION 904, BEGIN LINE 618, DELETE AND INSERT AS FOLLOWS:

**(b) Coarse Aggregate Angularity for HMA and SMA.** The coarse aggregate angularity (CAA) ~~value~~ of the total blended aggregate ~~material~~, including recycled materials, shall meet or exceed the minimum values for the appropriate ESAL category and position within the pavement structure as follows:

SECTION 904, AFTER LINE 623, INSERT AS FOLLOWS:

For SMA mixtures, the total blended aggregate shall be 100% one face and 95% two face crushed.

SECTION 904, BEGIN LINE 641, DELETE AND INSERT AS FOLLOWS:

**(d) Surface Aggregate Requirements for HMA and SMA.** The surface mixture aggregate selection shall be based on the ESAL category as follows:

Coarse Aggregate Type	Traffic ESAL		
	< 3,000,000	< 10,000,000	≥ 10,000,000
Air-Cooled Blast Furnace Slag (Note 1)	Yes	Yes	Yes
Steel Furnace Slag	Yes	Yes	Yes
Sandstone	Yes	Yes	Yes
Crushed Dolomite	Yes	Yes	Note 1 <del>2</del>
Polished Resistant Aggregates (Note 1)	Yes	Yes	Note 2
Crushed Stone	Yes	No	No
Gravel (Note 1)	Yes	No	No

Note 1. ACBF or Gravel may not be used in SMA mixtures.

Note 2. Polish resistant aggregates or crushed dolomite may be used for HMA mixtures when blended with ACBF or sandstone but cannot exceed 50% of the coarse aggregate by mass (weight), or cannot exceed 40% of the coarse aggregate by mass (weight) when blended with steel furnace slag.

## ADMIXTURES FOR USE IN CONCRETE

The Supplements to the 1999 Standard Specifications are revised as follows:

SECTION 912, DELETE LINES 61 THROUGH 264.

SECTION 912, AFTER LINE 265, INSERT AS FOLLOWS:

**912.03 Admixtures for Use in Concrete.** *Admixtures for use in PCC shall be selected from the Department's list of approved Admixtures for PCC. An admixture may be added to the approved list by completing the requirements in ITM 806., Procedure D. Admixtures containing chloride added as an ingredient of manufacture are unacceptable.*

**(a) Air Entraining Admixtures.** *Air entraining admixtures are materials to be added to PCC mixtures at the mixer for the purpose of entraining air.*

**(b) Chemical Admixtures for Concrete.** *Chemical admixtures are materials to be added to PCC mixtures at the mixer for the purpose or purposes indicated below.*

**1. Type A.** *Type A is a water reducing admixture that reduces the quantity of mixing water required to produce concrete of a given consistency.*

**2. Type B.** *Type B is a retarding admixture that retards the setting of concrete.*

**3. Type C.** *Type C is a accelerating admixture that accelerates the setting and early strength development of concrete.*

**4. Type D.** *Type D is a water reducing and retarding admixture that reduces the quantity of mixing water required to produce concrete of a given consistency and retards the setting of concrete.*

**5. Type E.** *Type E is a water reducing and accelerating admixture that reduces the quantity of mixing water required to produce concrete of a given consistency and accelerates the setting and early strength development of concrete.*

**6. Type F.** *Type F is a high range water reducing admixture, HRWR, that reduces the quantity of mixing water required to produce concrete of a given consistency by 12% or greater.*

**7. Type G.** *Type G is a high range water reducing and retarding admixture, HRWRR, that reduces the quantity of mixing water required to produce concrete of a given consistency by 12% or greater and retards the setting of concrete.*

**8. High Range Water Reducing Admixture System.** *HRWR admixture system is a combination of admixtures that act as a type F admixture within a concrete mixture. The system consists of chemical admixtures and an air entraining admixture. One of the components shall be a type F admixture. Components shall be in accordance with 912.03 for their respective types.*

**9. High Range Water Reducing and Retarding Admixture System.**

*HRWRR admixture system is a combination of admixtures that act as a type G admixture within a concrete mixture. The system consists of chemical admixtures and an air entraining admixture. One of the components shall be a type F or a type G admixture. One of the components shall retard the setting of the concrete. Components shall be in accordance with 912.03 for their respective types.*

**(c) Test Report.** *Testing shall be performed by a recognized laboratory in accordance with ITM 806.*

1. *Air entraining admixtures shall be in accordance with AASHTO M 154.*
2. *Chemical admixtures shall be in accordance with AASHTO M 194 for their respective types.*
3. *Test reports shall not be more than five years old on January 1 of the approval year. New submittals of test reports more than five years old will be accepted, if all subsequent five year limited retest reports are submitted. Subsequent limited retest results shall comply with the dating and age requirements specified above and shall include the following tests as a minimum requirement for compliance.*
  - a. *infrared analysis, residue by oven drying, and specific gravity;*
  - b. *water content and time of setting;*
  - c. *flexural strength at three, seven, and 28 days;*
  - d. *relative durability.*

REFLECTIVE LENSES FOR SNOWPLOWABLE RAISED PAVEMENT MARKERS

Reflective lenses for snowplowable raised pavement markers manufactured by the following companies will be considered approved to meet the requirements of this contract.

<u>Model Number</u>	<u>Manufacturer</u>
Stimsonite #944	Avery Dennison/Stimsonite
Ray-O-Lite #2004	PAC-TEC, Inc.
3M #190	3M Corporation

## REFLECTIVE SHEETING

The Standard Specifications are revised as follows:

SECTION 801, BEGIN LINE 35, INSERT AS FOLLOWS:

*The background of construction signs shall be reflective sheeting in accordance with 913.10(b)1. The sheeting type used for construction signs shall be the same for the entire project. Reflective sheeting for drums shall be in accordance with 913.10(b)1. Effective on project lettings after July 1, 2006, the background for all construction signs shall be fluorescent orange reflective sheeting.*

SECTION 913, AFTER LINE 443, DELETE AND INSERT AS FOLLOWS:

*Trim molding shall be of the same material and thickness as the panels to which it is attached.*

*Panel bolts, flat washers, and lock-nuts shall be in accordance with ASTM B 211M (ASTM B 211), alloy 2024-T4. Panel bolts shall be 10 by 19 mm (3/8 by 3/4 in.) standard hex head. Lock-nuts shall be standard hex head.*

**3. Demountable Letters, Numbers, and Symbols.** *Backing material for letters, numerals, and symbols shall be 1.0 mm (0.040 in.) thick aluminum sheets in accordance with ASTM B 209M (ASTM B 209), alloy 3003-H14. Borders shall be 0.8 mm (0.032 in.) thick aluminum sheet in accordance with ASTM B 209M (ASTM B 209), alloy 6061-T6.*

**(b) Sheeting Material.** *Only sheeting materials from the Department's list of approved Sign Sheeting Materials shall be used. Sheeting materials will be placed and maintained on the Department's approved list in accordance with ITM 806, procedure G.*

**(d) 1. Reflective Sheeting.** ~~Three types of reflective~~ *Reflective sheeting shall be used for signs and channelizing devices; and delineation devices shall be in accordance with AASHTO M 268. Enclosed lens (engineer grade) and encapsulated lens (high intensity) reflective sheeting shall be used on signs and delineators, and barricades. Type V reflective sheeting may be used on delineators. flexible encapsulated lens *Reboundable reflective sheeting shall be used on plastic drums, flexible delineator posts, and other flexible channelizers.**

*The color chromaticity specifications limits, and the minimum reflective intensity values for fluorescent yellow, fluorescent yellow green, and fluorescent orange reflective sheeting materials shall be in accordance with the following tables.*

**COLOR SPECIFICATIONS LIMITS AND REFERENCE STANDARDS FOR  
FLUORESCENT REFLECTIVE SHEETING MATERIAL**

	<i>Chromaticity Coordinates</i>							
	<i>1</i>		<i>2</i>		<i>3</i>		<i>4</i>	
	<i>x</i>	<i>y</i>	<i>x</i>	<i>y</i>	<i>x</i>	<i>y</i>	<i>x</i>	<i>y</i>
<i>Fluorescent Orange</i>	0.583	0.416	0.535	0.400	0.595	0.351	0.645	0.355
<i>Fluorescent Yellow</i>	0.479	0.520	0.446	0.483	0.512	0.421	0.557	0.442
<i>Fluorescent Yellow/Green</i>	0.387	0.610	0.369	0.546	0.428	0.496	0.460	0.540

**DAYTIME LUMINANCE FACTORS FOR FLUORESCENT  
REFLECTIVE SHEETING MATERIAL**

<i>Color</i>	<i>Luminance Factor Limits (Y)</i>		
	<i>Min</i>	<i>Max</i>	<i>YF</i>
<i>Fluorescent Orange</i>	25	None	15
<i>Fluorescent Yellow</i>	45	None	20
<i>Flourescent Yellow/Green</i>	60	None	20

**MINIMUM REFLECTIVE INTENSITY VALUES FOR FLUORESCENT  
REFLECTIVE SHEETING MATERIAL**

<i>Observation Angle</i>	<i>Entrance Angle</i>	<i>Fluorescent Orange</i>	<i>Fluorescent Yellow</i>	<i>Fluorescent Yellow/Green</i>
0.2	-4.0	200	240	325
0.2	30.0	85	150	200
0.5	-4.0	80	165	175
0.5	30.0	32	75	70

## Utility Coordination Certification Waiver

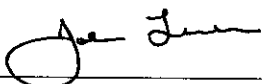
Contract No. RS-27522

Des. No. 0301038

Project Description: : US 31 HMA Resurface from 0.5 miles South of Business 31 to  
US 24

The undersigned agrees that the type of work included in this contract does not normally affect utility facilities and hereby approves this contract for a waiver from the need to follow utility coordination guidelines. (Examples of types of work that may be waived are: herbicide, mowing, raised pavement markers, traffic striping, sweeping, etc.)

DISTRICT DEVELOPMENT ENGINEER

 Date: 9/7/04  
Signed \_\_\_\_\_

John Leckie  
Printed