

TYPICAL SECTION APPLIES TO:

N CURTICE RD
NORDEN RD
PARK RD 2, 10, 11, 12, 13, 14

* NORDEN RD - ITEM 421, MICROSURFACING, SURFACE COURSE

PROPOSED LEGEND

① ITEM 421, MICROSURFACING, SURFACE COURSE, AS PER PLAN

EXISTING LEGEND

Ⓐ EXISTING ASPHALT PAVEMENT, DEPTH UNKNOWN



ITEM 421 - MICROSURFACING, SURFACE COURSE, AS PER PLAN

FOLLOW REQUIREMENTS OF 421 EXCEPT AS FOLLOWS:

REPLACE THE 702.16 TYPE C EMULSIFIED ASPHALT (BINDER) WITH ERGON ASPHALT & EMULSION'S E-FLEX (CSS-1EP) EMULSIFIED ASPHALT (BINDER) MEETING THE REQUIREMENTS BELOW.

PROPERTY	AASHTO TEST PROCEDURE	Specification
ASPHALT BASE PROPERTIES		
ODSR, KPA (G*/SIN DELTA, 10 RAD/SEC), 76 DEG C	T 315	MIN OF 1.00
TESTS ON EMULSION		
SAYBOLT FUROL VISCOSITY, 50 DEG C, SECONDS	T 59	15 TO 150
SIEVE TEST, %	T 59	MAX OF 0.1
RESIDUE BY EVAPORATION, %	T 59	MIN OF 62
RESIDUE PROPERTIES (1)		
R 78, PROCEDURE B		
MSCR, 70 DEG C, REC AT 3.2 KPA, %	T 350	MIN OF 80
MSCR, 70 DEG C, JNR AT 3.2 KPA	T 350	MAX OF 0.50

(1) RESIDUE PROPERTIES FROM LOW TEMPERATURE EVAPORATION FOLLOWING AASHTO R 78, PROCEDURE B. AFTER RECOVERING THE RESIDUE, THE SAMPLE MAY BE ANNEALED PRIOR TO TESTING TO REMOVE EXCESS MOISTURE AND PROVIDE FOR A CONSTANT SAMPLE. THE ANNEALING CAN BE ACCOMPLISHED BY PLACING 20 GRAMS OF RESIDUE IN A 6 OZ METAL CONTAINER (APPROXIMATELY 3-INCH DIAMETER) AND HEATING TO 163 DEG C FOR NO MORE THAN 15 MINUTES. THE SAMPLE SHOULD BE STIRRED WITH A SPATULA EVERY 5 MINUTES. THE SAMPLE CAN THEN BE PORED DIRECTLY INTO A 25 MM DSR SILICON MOLD FOR EVALUATION.

PROVIDE CERTIFIED TEST DATA OF EACH TANK SHIPPED TO THE PROJECT SHOWING THE MATERIAL MEETS THE REQUIREMENTS ABOVE. MATERIAL DOES NOT NEED TO BE ON THE SUPPLEMENT 1032 LIST.

FOLLOW 421.03 EXCEPT AS FOLLOWS:


REPLACE THE FOLLOWING MIX DESIGN REQUIREMENTS WITH THE BELOW.

TEST	MIXTURE CONTROL	SPECIFICATION
RANGE OF RESIDUAL ASPHALT, %	SEE 421.12	6.5 TO 9.0
RANGE OF MINERAL FILLER, %	+/- 0.5%	0.5 TO 3.0
TEST ISSA METHOD SPECIFICATION		
WET TRACK ABRASION LOSS, 1 HR SOAK, G/FT2	TB 100	MAX OF 38
WET TRACK ABRASION LOSS, 6 DAY SOAK, G/FT2	TB 100	MAX OF 60
LATERAL DISPLACEMENT, %	TB 147	MAX OF 5
EXCESS ASPHALT BY LWT, G/FT2	TB 109	MAX OF 50
SYSTEM COMPATIBILITY, MIN GRADE	TB 144	11 POINTS
MIXING TIME, SECONDS, 77 DEG F	TB 113	MIN OF 120
SET TIME, 30 MINUTES, KG-CM	TB 139	MIN OF 12
EARLY ROLLING TRAFFIC TIME, 60 MINUTES, KG-CM	TB 139	MIN OF 20
WATER RESISTANCE, 30 MINUTES	TB 102	NO DISCOLORATION
WET STRIPPING TEST, % COATING	TB 114	MIN OF 90
SYSTEM COMPATIBILITY	TB 115	PASS
TO BE CONDUCTED AT RECOMMENDED JOB MIX FORMULA		
CANTABRO MASS LOSS, % (1)	TX 245-F	MAX OF 2.0
BULK SPECIFIC GRAVITY (1)	AASHTO T 166	2.100 TO 2.400
IDEAL CT, PEAK LOAD (2)	ASTM D8225	MIN OF 2,000
IDEAL CT, CT INDEX (2)	ASTM D8225	MIN OF 100
MSCR, 70 DEG C, JNR AT 3.2 KPA	T 350	MAX OF 0.50

- (1) SAMPLES TO BE PREPARED BY ISSA TB 148 MARSHALL COMPACTION ONLY (30 BLOWS PER SIDE) AND TESTED IN DRY CONDITION AT 25 DEG C.
 - a. A COMPACTION TEMPERATURE OF 154 DEG C HAS BEEN FOUND TO BE SUFFICIENT.
 - b. FOUR HOURS OF TOTAL HEATING +/- 5 MINUTES HAS BEEN FOUND TO BE SUFFICIENT TO REACH COMPACTION TEMPERATURE.
 - c. ALLOW TO COOL AND MEASURE BULK SPECIFIC GRAVITY.
 - d. PERFORM TEX T245-F ONCE THE SAMPLES HAVE DRIED TO CONSTANT MASS IN FRONT OF A FAN AT ROOM TEMPERATURE.
- (2) PREPARE SAMPLES FOR ASTM D8225:
 - a. MIX COMPONENT MATERIALS AND SPREAD THEM APPROXIMATELY TWO INCHES THICK ON RELEASE PAPER. ALLOW THE MIXTURE TO CURE AT 60 DEG C FOR 16 HOURS.
 - b. PROPORTION THE MATERIAL TO YIELD PROPER DIMENSIONS FOR THE TEST.
 - c. HEAT THE MIXTURE TO 154 DEG C FOR FOUR HOUR +/- 5 MINUTES AND COMPACT TO A MINIMUM OF 2.200 G/ML WITH A SUPERPAVE GYRATORY COMPACTOR AT 30 GYRATIONS.
 - d. ALLOW TO COOL AND MEASURE BULK SPECIFIC GRAVITY.
 - e. PERFORM ASTM D8225 AT LEAST 16 HOURS AFTER TESTING BULK DENSITY.

SUBMIT THE JOB MIX FORMULA AND MATERIALS TO MIKE HEMSLEY OF PARAGON TECHNICAL SERVICES (ERGON) AT 390 CARRIER BLVD, RICHLAND, MS 39218 TO VERIFY THE JOB MIX FORMULA MEET THE REQUIREMENTS ABOVE. THE COST OF VERIFICATION IS INCIDENTAL TO THIS LINE ITEM. SUBMIT A LETTER FROM PARAGON TECHNICAL SERVICES APPROVING THE JOB MIX FORMULA AND THEIR RESULTS TO OMM TO OBTAIN A JMF NUMBER.

DESIGN AGENCY



DESIGNER
NE

REVIEWER
JMF MM-DD-YY

PROJECT ID
117289

SHEET TOTAL
P.4A 12

SHEET NUM.

PART.

ITEM

ITEM
EXT

GRAND
TOTAL

UNIT

DESCRIPTION

SEE SHEET
NO.

4

6

7

01/NFA/05

SPECIAL

20253010

33

EACH

ROADWAY
PARKING BLOCK REMOVED AND RESET

4

PAVEMENT

1,905

2,922

35,197

1,905

251

01000

1,905

SY

PARTIAL DEPTH PAVEMENT REPAIR (441)

2,922

421

10010

2,922

SY

MICROSURFACING, SURFACE COURSE

35,197

421

10011

35,197

SY

MICROSURFACING, SURFACE COURSE, AS PER PLAN

4A

TRAFFIC CONTROL

6.05

1.3

7.35

2,677

24

6.05

1.3

7.35

2,677

24

642

642

642

644

644

00100

00300

30030

30000

30020

6.05

1.3

7.35

2,677

24

MILE

MILE

MILE

FT

EACH

EDGE LINE, 4", TYPE 1

CENTER LINE, TYPE 1

REMOVAL OF PAVEMENT MARKING

REMOVAL OF PAVEMENT MARKING

REMOVAL OF PAVEMENT MARKING

4

232

230

189

4

2,027

20

232

230

189

4

2,027

20

646

646

646

646

646

646

10300

10400

10600

10900

20200

20300

232

230

189

4

2,027

20

FT

FT

FT

EACH

FT

EACH

CHANNELIZING LINE, 8"

STOP LINE

TRANSVERSE/DIAGONAL LINE

HANDICAP SYMBOL MARKING

PARKING LOT STALL MARKING

LANE ARROW

MAINTENANCE OF TRAFFIC

7

5

5

2.6

7

5

5

2.6

614

614

614

614

12460

12500

12600

21550

7

5

5

2.6

EACH

EACH

EACH

MILE

WORK ZONE MARKING SIGN

REPLACEMENT SIGN

REPLACEMENT DRUM

WORK ZONE CENTER LINE, CLASS III, 642 PAINT

INCIDENTALS

LS

LS

614

624

11000

10000

LS

LS

MAINTAINING TRAFFIC

MOBILIZATION

4

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER

NE

REVIEWER

JMF MM-DD-YY

PROJECT ID

117289

SHEET TOTAL


P.5 12

LUC ODNR MAUMEE BAY STATE PARK

MODEL: Sheet PAPER:SIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 10:19:11 AM USER: nalktech
 p:\ohiodot-pw-bentley.com\ohiodot-pw-02\Documents\07 Active Projects\District 02\Lucas\117289\400-Engineering\Roadway\Sheets\117289_GS001.dgn

REF NO.	SHEET NO.	STATION TO STATION	421 MICROSURFACING, SURFACE COURSE, AS PER PLAN SY	421 MICROSURFACING, SURFACE COURSE SY
8		N CURTICE RD	3626.67	
8		PARK RD 2	3559.89	
9		NORDEN RD		2921.56
9-12		PARK RD 10 (INCLUDING PARKING LOT 3)	18530.22	
9		PARK RD 11	2046.44	
9		PARK RD 12 (INCLUDING PARKING LOT 2)	3351.00	
11		PARK RD 13 (INCLUDING PARKING LOT 1)	2884.67	
11		PARK RD 14	1197.22	
TOTALS CARRIED TO GENERAL SUMMARY			35197	2922

PAVEMENT SUBSUMMARY

DESIGN AGENCY

 DESIGNER
 NE
 REVIEWER
 JMF MM-DD-YY
 PROJECT ID
 117289
 SHEET TOTAL
 P:6 | 12