# CRA-30-15.93

# BEGIN PROJECT CRA-30-15.80 **END PROJECT** CRA-30-22.21= RIC-30-0.00

#### **LOCATION MAP**

LATITUDE: 40° 45' 44" N LONGITUDE: 82° 47' 10" W



PORTION TO BE IMPROVED
INTERSTATE HIGHWAY
FEDERAL ROUTES
STATE ROUTES
COUNTY & TOWNSHIP ROADS
OTHER ROADS

DESIGN DESIGNATION	CRA-30- 15.93 TO 18.33	CRA-30- 18.33 TO 22.21
CURRENT ADT (2022)	15,500	20,500
DESIGN YEAR ADT (2042)	18,000	23,000
DESIGN HOURLY VOLUME (2042)	1,800	2,300
DIRECTIONAL DISTRIBUTION	52%	55%
TRUCKS (24 HOUR B&C)	40%	35%
DESIGN SPEED	70 MPH	70 MPH
LEGAL SPEED	70 MPH	70 MPH
DESIGN FUNCTIONAL CLASSIFICATION	Α	В
NHS PROJECT LOCATION	YES	YES

FUNCTIONAL CLASSIFICATIONS:

- A RURAL FREEWAYS AND EXPRESSWAYS
- B URBAN FREEWAYS AND EXPRESSWAYS

#### **DESIGN EXCEPTIONS**

#### ADA DESIGN WAIVERS

NONE



# **STATE OF OHIO** DEPARTMENT OF TRANSPORTATION

CRA-30-15.80

VILLAGE OF CRESTLINE CITY OF GALLION

JEFFERSON TOWNSHIP JACKSON TOWNSHIP

CRAWFORD COUNTY

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STANDARD CONSTRUCTION DRAWINGS

7/19/19 TC-41.20

1/17/20 TC-42.20

7/21/17 TC-52.10

1/17/20 TC-52.20

1/17/20 TC-61.30

4/19/19 TC-65.10

1/17/20 TC-65 11

1/17/20 TC-73.20

TC-72.20

1/17/20

4/19/19

1/17/20

7/17/20

4/19/19

10/16/15

10/16/15

1/17/20 MT-95.30

1/18/19 MT-95 45

MT-95.50

MT-98.10

MT-98.11

MT-98.20

MT-98 22

MT-98.28

MT-98.29

MT-99.20

MT-101.60

MT-101.90

MT-102.20

MT-102.30

MT-104.10

MT-105.10

ENGINEER'S SEAL:

TE OF OX

KENNETH

CARL

KNAPP

E-83359

PEGISTERED

SONAL ENGINEER

SIGNED

DATE:

#### FEDERAL PROJECT NUMBER

#### RAILROAD INVOLVEMENT

CSX TRANSPORTATION

#### **PROJECT DESCRIPTION**

THIS PROJECT INVOLVES THE RESURFACING OF US ROUTE 30 AND ANCILLARY ROADWAYS, INCLUDING RAMPS, INTERCHANGES, AND CROSSOVERS. IT ALSO INCLUDES MINOR STRUCTURE MAINTENANCE AND GUARDRAIL UPGRADES.

#### EARTH DISTURBED AREAS

PROJECT EDA: ESTIMATED CONTRACTOR EDA: NOTICE OF INTENT EDA:

EDA = EARTH DISTURBED AREA \* = (MAINTENANCE PROJECT)

#### LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

#### 2019 SPECIFICATIONS

SUPPLEMENTAL

**SPECIFICATIONS** 

1/15/2

7/17/2

1/18/1

4/20/1

1/15/2

1/15/2

4/17/2

4/20/1

10/20/1

10/19/1

800-2019

10/18/13

10/18/13 807

10/18/13 808

1/15/21 821

1/17/14 850

7/21/17 861

1/17/20 908

7/19/19

7/20/1

SPECIAL

**PROVISIONS** 

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING
SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS

PLANS PREPARED BY:



#### MAINTENANCE OF TRAFFIC ENDORSEMENT

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED AND DETAILED IN THE MAINTENANCE OF TRAFFIC NOTES AND DETAILS INCLUDED IN THESE PLANS, AND THAT THE PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED	
DATE	ROBERT WEAVER, PE, PS DISTRICT DEPUTY DIRECTOR
APPROVED	
DATE	JACK MARCHBANKS, PhD, DIRECTOR

DISTRICT 3 ENGINEERING TEAM ONE KCK

NRF 09/01/21 91097

P.001 P.039

DEPARTMENT OF TRANSPORTATION

**UTILITIES** 

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

CABLE

ELECTRIC AEP OHIO 2552 QUAKER ROAD BUCYRUS, OH 44820 419.563.1509

GAS COLUMBIA GAS OF OHIO 1021 NORTH MAIN STREET MANSFIELD, OH 44903 419.528.1134

COMMUNICATION FRONTIER COM 83 TOWNSEND AVENUE NORWALK, OH 44857 419.744.3613

COMMUNICATION LEVEL 3 COMMUNICATIONS 106 SOUTH ARLINGTON STREET AKRON, OH 44306 740.275.1133

ELECTRIC OHIO EDISON 1717 ASHLAND ROAD MANSFIELD, OH 44905 CHARTER COMMUNICATIONS 5520 WHIPPLE AVENUE NW NORTH CANTON, OH 44720 330.494.9200

GAS TC ENERGY 589 N STATE ROAD MEDINA, OH 44256 330.721.4163

CITY CITY OF GALION 301 HARDING WAY EAST GALION, OH 44833 419.468.2818

COMMUNICATION VERIZON BUSINESS 120 RAVINE STREET AKRON, OH 44303 330.253.8267

FIBER OPTIC SPRINT

11370 ENTERPRISE PARK DRIVE SHARONVILLE, OH 45241

419.521.6213 513.612.4204

THE AFOREMENTIONED UTILITY COMPANIES AND AGENCIES HAVE VARIOUS FACILITIES IN THE AREA THAT WILL REMAIN IN PLACE DURING CONSTRUCTION.

EXTREME CAUTION SHOULD BE EXERCISED IN AREAS WITH UTILITIES. SECTIONS 105.07 AND 107.16 OF THE DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS REQUIRE, AMONG OTHER THINGS, THAT THE CONTRACTOR COOPERATE WITH ALL UTILITIES LOCATED WITHIN THE LIMITS OF THIS CONSTRUCTION PROJECT AND TAKE RESPONSIBILITY FOR THE PROTECTION OF THE UTILITY PROPERTY AND SERVICES.

## EXISTING PLANS

EXISTING PLANS AS LISTED BELOW MAY BE INSPECTED IN THE ODOT DISTRICT THREE OFFICE IN ASHLAND.

EXISTING PLAN TITLE	<u>DATED</u>
CRA-30-9.53/RIC-30-0.00	2014
CRA-30-24.000	2001
CRA/RIC-30-33.500/0.000	2001

### WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

#### **ROUTINE MAINTENANCE**

BETWEEN THE TIME THAT BIDS ARE TAKEN AND THE START OF CONSTRUCTION, THE MAINTAINING AGENCY MAY ENTER UPON THE PROJECT AND PERFORM ROUTINE MAINTENANCE SUCH AS CRACK SEALING, PATCHING, AND BERM AND SHOULDER REPAIR. THE EFFECTS, IF ANY, OF THE PERFORMANCE OF ROUTINE MAINTENANCE SHALL BE CONSIDERED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE PLAN AND THE RESULTING CONDITIONS SHALL NOT BE CONSIDERED AS DIFFERING MATERIALLY FROM THOSE EXISTING AT THE TIME BIDS WERE TAKEN.

#### PROFILE AND ALIGNMENT

PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. (PREVIOUS CONSTRUCTION PLANS SHOWING THE ORIGINAL ALIGNMENT AND PROFILE, ARE AVAILABLE FOR INSPECTION AT THE ODOT DISTRICT 3 OFFICE). PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS.

#### <u>PART-WIDTH CONSTRUCTION</u> (P105)

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

#### ITEM 254 - PATCHING PLANED SURFACE

AN ESTIMATED QUANTITY OF ITEM 254 - PATCHING PLANED SURFACE HAS BEEN SET UP TO BE USED AS DIRECTED BY THE ENGINEER AS DESCRIBED IN CMS 254.04. THE LIMIT OF THE PATCHING DEPTH IS 0 TO 2 IN.

#### ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE

THE INTENT OF THE PLANING IS TO MILL THE DEPTH SPECIFIED IN THE TYPICAL SECTIONS AND PAVEMENT AND SHOULDER DATA SHEET AS MEASURED AT THE CENTER OF PAVEMENT AT NON-CURBED AREAS. THE PAVEMENT SLOPE SHALL BE 0.010 MINIMUM AND 0.016 PREFERRED IN NORMAL CROWNED AREAS, CONTINUOUS BETWEEN THE CROWN AND THE PROPOSED EDGE LINE/SHOULDER. THE MILLING DEPTH SHALL BE CONTROLLED FROM THE CENTER OF PAVEMENT IN CONFORMANCE WITH THE ABOVE GUIDELINES.

SPECIAL ATTENTION SHALL BE GIVEN TO SUPERELEVATED CURVES. THE SUPERELEVATION SHALL BE MAINTAINED AND/OR RESTORED, IF NECESSARY, AS DIRECTED BY THE ENGINEER. IF THERE IS NO INFORMATION IN THE PLANS TO CHANGE THE SUPERELEVATION, THE INTENT IS TO MAINTAIN THE EXISTING SUPERELEVATION.

THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE TO ALL CATCH BASINS AND INLETS.

THE PROGRESSION OF THE PLANING SHALL PROCEED IN SUCH A MANNER THAT NORMAL TRAFFIC WILL NOT BE REQUIRED TO RUN OVER THE PLANED ROADWAY SURFACE MORE THAN SEVEN (7) CALENDAR DAYS. FOR EACH CALENDAR DAY BEYOND THE SEVEN DAYS THAT THE ROADWAY REMAINS EXPOSED TO THE PLANED SURFACE, THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE FEE OF \$3,500.00 PER DAY.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT PLANING, ASPHALT CONCRETE. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER SQUARE YARD OF ITEM 254 - PAVEMENT PLANING. ASPHALT CONCRETE.

#### ITEM 203 - EMBANKMENT, AS PER PLAN

THE INTENT OF THIS ITEM IS TO BRING THE UNDERLYING EXISTING EMBANKMENT SURFACE UP TO MEET THE RAISED PAVEMENT PROFILE IN AREAS OF EXISTING AND PROPOSED GUARDRAIL RUNS. PROVIDE EMBANKMENT AT THE DIRECTION OF THE ENGINEER UNDER THE GUARDRAIL RUNS WHERE INDICATED IN THESE PLANS TO AFFECT A SMOOTH TRANSITION FROM THE PROPOSED EDGE OF PAVED SHOULDER AND/OR EDGE OF AGGREGATE SHOULDER THROUGH THE INFLUENCE AREA OF THE GUARDRAIL. FOR ESTIMATION PURPOSES, A WIDTH OF SIX FEET, MEASURED PERPENDICULAR TO THE EDGE OF AGGREGATE SHOULDER TO AND THROUGH THE SPECIFIED GUARDRAIL RUNS, AN AVERAGE OF TWO INCHES THICK, FOR THE LENGTH OF SAID GUARDRAIL RUNS, WAS USED.

UPON COMPLETION OF THE INSTALLATION OF THE EMBANKMENT AND AT THE POINT WHERE NO CONSTRUCTION EQUIPMENT OR ACTIVITIES WOULD AFFECT THE SURFACE OF THE TREATED AREA, PROVIDE SEEDING AND MULCHING IN ACCORDANCE WITH C&MS 659.

ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NEEDED TO COMPLETE THE ABOVE DESCRIBED WORK WILL BE PAID FOR UNDER THE CONTRACT BID PRICE PER CUBIC YARD FOR ITEM 203 – EMBANKMENT, AS PER PLAN.

#### ITEM 618 - RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN

PLACE THE RUMBLE STRIP ON THE INSIDE SHOULDER AS PER STANDARD CONSTRUCTION DRAWING BP-9.1. PLACE THE RUMBLE STRIP ON THE OUTSIDE SHOULDER CENTERED BETWEEN THE EDGE OF PAVEMENT AND EDGE OF PAVED SHOULDER. ALL OTHER ASPECTS OF THE OUTSIDE RUMBLE STRIP ARE TO REMAIN AS PER DETAILED ON STANDARD CONSTRUCTION DRAWING BP-9.1

ALL WORK NEEDED TO COMPLETE THIS WORK WILL BE INCLUDED IN THE CONTRACT BID PRICE PER MILE FOR ITEM 618 – RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN AND WILL INCLUDE ALL MATERIAL. LABOR. EQUIPMENT. AND INCIDENTALS NEEDED.

#### RAISED PAVEMENT MARKERS REMOVED ON BRIDGE DECKS

REMOVE, AND DO NOT REINSTALL RAISED PAVEMENT MARKERS ON STRUCTURES WHICH SPAN TRANSPORTATION FACILITIES SUCH AS RAILWAYS OR OTHER HIGHWAY FACILITIES. FOR STRUCTURES WITH PROPOSED ASPHALT CONCRETE WEARING SURFACES, PLANE AND PAVE AS DETAILED IN THESE PLANS WITHOUT REINSTALLING RPMs AS DETAILED ABOVE. FOR STRUCTURES WITH PORTLAND CEMENT CONCRETE WEARING SURFACES, REMOVE THE RPMS AND FILL IN THE VOID LEFT IN ITS PLACE WITH AN APPROVED EPOXY MATERIAL, SUCH AS THE FPOXY USED TO INSTALL NEW RPMS

FOR STRUCTURES THAT DO NOT SPAN OTHER TRANSPORTATION FACILITIES, REMOVE AND REPLACE RPMs AS DETAILED IN THESE PLANS.

ALL MATERIALS, EQUIPMENT, LABOR, AND INCIDENTALS NEEDED TO COMPLETE THIS WORK WILL BE INCLUDED IN THE CONTRACT BID PRICE FOR ITEM 621 – RAISED PAVEMENT MARKER REMOVED.

#### TRAFFIC CONTROL

- 1- STRIPE ALL THROUGH LANES AT 12', WITH THE LANE LINE MAINTAINING ITS EXISTING LOCATION.
- 2- STRIPE ALL RAMPS AND SPEED CHANGE LANES AT THEIR EXISTING WIDTH IN THEIR EXISTING CONFIGURATION. UNLESS SHOWN OTHERWISE IN THESE PLANS.
- 3- PLACE TWO WRONG WAY ARROWS PER RAMP IN ACCORDANCE WITH SCD TC-73.20
- ALL EXISTING STOP LINES, CHANNELIZING LINES, LANE LINES, AND EDGE LINES ARE TO BE REPLACED WITH WORK ZONE LINES AFTER THE EXISTING MARKINGS ARE REMOVED AND PRIOR TO OPENING TRAFFIC TO THE AFFECTED SECTION OF ROADWAY. QUANTITIES ARE INTENDED TO BE PLACED AFTER MILLING, AFTER THE INTERMEDIATE COURSE (IF APPLICABLE), AND AFTER SURFACE COURSE PRIOR TO PERMANENT MARKINGS.
- 5- USE 642 PAINT, TYPE 1 FOR ALL WORK ZONE PAVEMENT MARKINGS.
- 6- CONTINUE 850/807 MARKINGS OVER BRIDGE DECKS; DO NOT INTERRUPT RECESSED WET REFLECTIVE MARKINGS.

# ITEM 251 – PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE) ITEM 253 – PAVEMENT REPAIR

THESE ITEMS OF WORK SHALL CONSIST OF THE REMOVAL OF THE EXISTING PAVEMENT OR PAVED BERM WHICH MAY BE ASPHALT, BRICK, CONCRETE, OR A COMBINATION OF EACH, IN AREAS OF EXISTING PAVEMENT FAILURE.

PAVEMENT REPAIR SHALL BE PERFORMED PRIOR TO PAVEMENT PLANING. THE DEPTH OF REMOVAL SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT.

REPLACEMENT MATERIAL SHALL BE ITEM 301 AND SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT PAVEMENT SURFACE.

FOR ITEM 253 – PAVEMENT REPAIR, PLACE AT LEAST ONE LIFT OF 301 BASE OVER THE ENTIRE AREA OF THE REPAIR BY THE END OF THE WORK SHIFT, NOT ALLOWING A FULL DEPTH REMOVAL AREA WHEN WORK IS NOT TAKING PLACE.

PAYMENT SHALL INCLUDE ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NEEDED TO COMPLETE THE ABOVE WORK. FOR PAYMENT AND ESTIMATING PURPOSES, ITEM 251 – PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE) IS TO BE A MAXIMUM OF 4" DEEP AS MEASURED FROM THE EXISTING PAVEMENT SURFACE. ITEM 253 – PAVEMENT REPAIR IS CONSIDERED FOR ANY REPAIRS DEEPER THAN 4" FROM THE EXISTING PAVEMENT SURFACE. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER CUBIC YARD, BY TICKET WEIGHT CONVERSION, OF ITEM 251 – PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE) OR ITEM 253 – PAVEMENT REPAIR. THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. THE BREAKDOWN OF LONGITUDINAL VERSUS TRANSVERSE REPAIRS MAY BE CONSIDERED AT 65% TRANSVERSE AND 35% LONGITUDINAL OF THE BELOW QUANTITY.

ΜΔΙΝΙΙ ΙΝΙΕ:

ITEM 251 – PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE) 1173 CY ITEM 253 – PAVEMENT REPAIR 1694 CY

RAMPS:

RAMPS: ITEM 251 – PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE) 27 CY ITEM 253 – PAVEMENT REPAIR 6 CY

TOTAL:

ITEM 251 – PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE) 1200 CY ITEM 253 – PAVEMENT REPAIR 1700 CY

#### ITEM 203 – EXCAVATION ITEM 304 – AGGREGATE BASE

IN AREAS OF SUB-BASE FAILURE, AND AS DIRECTED BY THE ENGINEER, IN CONJUNCTION WITH ITEM 253 – PAVEMENT REPAIR, PERFORM ITEM 203 – EXCAVATION AND ITEM 304 – AGGREGATE BASE. REMOVE APPROXIMATELY 6" OF SUB-BASE IN THESE AREAS, REPLACING THE REMOVED MATERIAL WITH ITEM 304. LIFT LIMITS AND COMPACTION REQUIREMENTS ARE AS DETAILED IN C&MS 304.

ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NEEDED TO COMPLETE THIS WORK WILL BE PAID FOR AT THE CONTRACT BID PRICE FOR CUBIC YARD FOR ITEM 203 – EXCAVATION AND ITEM 304 – AGGREGATE BASE. THE FOLLOWING QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY:

MAINLINE:

 ITEM 203 – EXCAVATION
 90 CY

 ITEM 304 – AGGREGATE BASE
 90 CY

DESIGN AGENCY
DISTRICT 3

ENGINEERING TEAM ONE ESIGNER KCK

REVIEWER
NRF 09/01/21

91097 ET \_TOTAL

P.013 P.039

#### AC GAUGE OFFSET, AS PER PLAN

#### FOLLOW 403, EXCEPT AS FOLLOWS:

- OFFSET THE AC GAUGE FOR EACH JMF FOR THE PROJECT PRIOR TO THE PROJECT'S START USING 403.06.A. AND THE MODIFIED SUPPLEMENT 1043 PROCEDURE BELOW.
- DURING S-1043.07 PROCESS, A RAP SAMPLE OBTAINED FROM THE JMF-DESIGNATED RAP PILE WILL BE EXTRACTED IN THE ASPHALT LEVEL 3 LAB TO VERIFY THE RAP AC %. THE RAP AC % WILL BE WITHIN 0.3% OF THE AVERAGE RAP AC % FROM THE JMF. IF RAP AC % IS OUTSIDE OF THE 0.3%, THE VERIFICATION PAN PROCESS WILL STOP, AND DISTRICT TESTING WILL ALLOW ONE OPPORTUNITY TO REWORK THE RAP PILE AT THE MIX PLANT AND RESAMPLE. RESAMPLING REQUIRES DISTRICT TESTING TO BE PRESENT. IF THE RESAMPLE IS STILL OUTSIDE OF THE 0.3%, THE JMF WILL BE RESCINDED AND NEED TO BE REDESIGNED.

#### FOLLOW 403.06 EXCEPT AS FOLLOWS:

- ENSURE ASPHALT BINDER CONTENT DOES NOT EXCEED TABLE 403.06.G-1.
  ADJUSTMENTS TO MIX PLANT CONTROL SETTINGS MUST BE SUBMITTED TO AND APPROVED BY DISTRICT TESTING PRIOR TO MAKING THE ADJUSTMENT. THE ADJUSTMENT CANNOT EXCEED +/- 0.2% FROM DESIGN AC % FROM JMF. DO NOT LOWER VIRGIN BINDER CONTENT OR INCREASE RAP PERCENT. ENSURE PLANT TICKET SHOWS THE ADJUSTMENT AND IS SET TO THE ADJUSTED TOTAL AC % AT ALL TIMES AFTERWARDS.
- RECORD THE DAILY VERIFICATION PAN RESULTS IN A SEPARATE WORKSHEET AND MAKE SURE IT'S POSTED IN THE PLANT FACILITY AND AVAILABLE TO THE MONITORS. INCLUDE THE DATE RAN, VERIFICATION PAN RESULT, AND INITIALS OF WHO RAN IT. ENSURE A PRINTOUT OF THE DAILY VERIFICATION PAN IS ALSO INCLUDED WITH THE TE-199.

#### FOLLOW SUPPLEMENT 1043 FOR AC GAUGE OFFSET, EXCEPT AS MODIFIED BELOW:

- FOLLOW 1043.07 EXCEPT AS FOLLOWED:
  - O NOTIFY DISTRICT TESTING A MINIMUM OF ONE WEEK PRIOR TO MAKING VERIFICATION PANS.
  - O DISTRICT TESTING WILL WITNESS A SOLVENT EXTRACTION FROM A SAMPLE FROM THE RAP PILE THAT IS TO BE USED IN THE JMF TO VERIFY THE RAP AC %. RAP AC % WILL BE WITHIN 0.3% OF RAP AC % DETERMINED IN JMF. IF OUTSIDE OF 0.3%, DO NOT PROCEED AND THE JMF WILL NEED TO BE REDESIGNED.
  - DISTRICT TESTING WILL WITNESS THE VERIFICATION PANS BEING BLENDED, MIXED, AND COMPACTED.
  - MAKE A MINIMUM OF THREE VERIFICATION PANS FOR THE JMF THAT ARE AT THE JMF ASPHALT BINDER CONTENT. MAKE ONE ADDITIONAL VERIFICATION PAN FOR EACH ADDITIONAL DISTRICT THE JMF WILL BE USED IN
  - O IN ADDITION, TURN POSSESSION OVER OF THE CALIBRATION AC GAUGE PANS USED TO DETERMINE THE FIT COEFFICIENT TO DISTRICT TESTING. FOR AC CONTENT PAY ACCEPTANCE, REPLACE 1043.08 WITH THE FOLLOWING:

CALCULATE AN AC GAUGE OFFSET AMOUNT FOR EACH JMF AND MIX PLANT IN ACCORDANCE WITH THE FOLLOWING PROCEDURE PRIOR TO START OF ANY PRODUCTION FOR THE JMF. NOTIFY DISTRICT TESTING 24 HOURS PRIOR TO OFFSETTING GAUGE.

- 1. ENSURE PRINTER IS ON AND PLACE THE FIRST VERIFICATION PAN IN THE AC GAUGE
- 2. AFTER THE 16-MINUTE TEST, TAKE THE VERIFICATION PAN OUT AND TURN 180 DEGREES AND PLACE BACK IN AC GAUGE AND RUN.
- 3. REPEAT STEPS 1 AND 2 WITH SECOND AND THIRD VERIFICATION PANS.
- 4. FOR EACH RUN, TAKE THE JMF ASPHALT BINDER CONTENT MINUS THE AC GAUGE AC % TO OBTAIN THE OFFSET FOR THAT RUN.
- 5. AVERAGE ALL OFFSETS FOR A FINAL OFFSET.
- RETAIN ALL OF THE VERIFICATION PANS. AFTER THE FINAL OFFSET IS DETERMINED, DISTRICT TESTING WILL CHOOSE TWO OF THE VERIFICATION PANS AND SEND ONE OF THESE TWO TO OMM TO EXTRACT AND REFLUX.
- 7. DISTRICT TESTING WILL USE THE TWO VERIFICATION PANS TO OFFSET THEIR AC

BEFORE THE BEGINNING OF A PRODUCTION DAY, RUN THE VERIFICATION PAN IN THE AC GAUGE AND ENSURE THE OFFSET AC GAUGE AMOUNT IS WITHIN 0.14% OF THE JMF ASPHALT BINDER CONTENT. DURING THE START OF PRODUCTION FOR THE JMF, SOLVENT EXTRACT THE FIRST TWO QC SAMPLES AND COMPARE TO THE OFFSET AC GAUGE. ENSURE SOLVENT EXTRACTION IS WITHIN 0.3% OF OFFSET AC GAUGE. IF MORE THAN 0.3% OFF, IMMEDIATELY RESAMPLE AND RUN AC GAUGE AND SOLVENT EXTRACT IMMEDIATELY. IF TWO CONSECUTIVE SAMPLES ARE MORE THAN 0.3% OFF, IMMEDIATELY STOP PRODUCTION, CONTACT MONITORING TEAM, AND INVESTIGATE THE REASON FOR THE PROBLEM. ONCE TWO CONSECUTIVE QC SAMPLES ARE WITHIN 0.3% OF OFFSET AC GAUGE, THE FINAL OFFSET GAUGE IS CONFIRMED.

AFTER CONFIRMING THE AC GAUGE OFFSET AMOUNT PROCEED WITH DETERMINING AC CONTENTS OF PRODUCTION SAMPLES BY THE AC GAUGE ACCORDING TO 1043.09.

ONLY DETERMINE ONE AC GAUGE OFFSET AMOUNT PER JMF. IF MORE THAN 30 DAYS HAS LAPSED SINCE THE JMF WAS LAST TESTED, RE-DO THE OFFSET PROCEDURE ABOVE WITH TWO VERIFICATION PANS (ONE FROM THE CONTRACTOR AND ONE FROM THE DISTRICT). IF AN AC GAUGE OFFSET AMOUNT IS LATER DETERMINED, BY AN INVESTIGATION OF BOTH THE CONTRACTOR AND THE DISTRICT, TO BE INCORRECT RE-DO THE OFFSET PROCEDURE.

IN ADDITION, ALSO DETERMINE THE AC GAUGE OFFSET FOLLOWING THE CURRENT PROCEDURE AS OUTLINED IN SUPPLEMENT 1043 DATED JANUARY 21, 2022 AND PROVIDE THE INFORMATION TO THE DEPARTMENT. THIS AC GAUGE OFFSET NUMBER WILL NOT BE USED DURING QC TESTING



ENGINEERING TEAM ONE

DESIGNER KCK

REVIEWER NRF 09/01/21

> 91097 HEET TOTAL 2 014a P 0

P.014a P.039