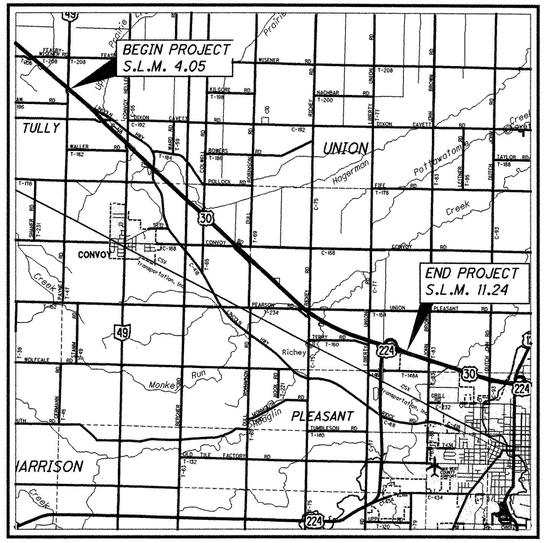


LOCATION MAP

LATITUDE: 40°-55'-00" LONGITUDE: 84°-40'-25"

SCALE IN MILES

0 1 2 3 4

PORTION TO BE IMPROVED

INTERSTATE HIGHWAY

FEDERAL ROUTES

STATE ROUTES

COUNTY & TOWNSHIP ROADS

OTHER ROADS

DESIGN DESIGNATION

	S.L.M. 4.05-5.22	S.L.M. 5.22-10.70	S.L.M. 10.70-11.40
CURRENT ADT (2017)	12,960	13,340	12,700
DESIGN YEAR ADT (2029)	16,460	16,800	15,530
DESIGN HOURLY VOLUME (2029)	1,650	1,680	1,550
DIRECTIONAL DISTRIBUTION	0.52%	0.51%	0.55%
TRUCKS (24 HOUR B&C)	0.34%	0.33%	0.35%
DESIGN SPEED	70 M.P.H.	70 M.P.H.	70 M.P.H.
LEGAL SPEED	70 M.P.H.	70 M.P.H.	70 M.P.H.

DESIGN FUNCTIONAL CLASSIFICATION:
02 RURAL PRINCIPAL ARTERIAL
NHS PROJECT ..... YES

DESIGN EXCEPTIONS

NONE

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG.

OHIO Utilities Protection SERVICE — Call Before You Dig 1-800-362-2764

(Non-members must be called directly)

OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE 1-800-925-0988

PLAN PREPARED BY:
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 1
LIMA, OHIO

ENGINEERS SEAL:

STATE OF OHIO — JENNIFER L GASSER 73984 — REGISTERED PROFESSIONAL ENGINEER

SIGNED: Jennifer L Gasser
DATE: 1-30-17

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

VAN-30/224-4.05/11.44

TULLY, UNION & PLEASANT TOWNSHIPS
VAN WERT COUNTY

INDEX OF SHEETS:

TITLE SHEET	1
SCHEMATIC PLAN	2-4
TYPICAL SECTIONS	5-6
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MAINTENANCE OF TRAFFIC	8-10
GENERAL SUMMARY	11
SUBSUMMARIES	12-15
PAVMENT REPAIR DETAILS	16

PROJECT DESCRIPTION

PLANING AND RESURFACING OF 7.19 MILES OF U.S.R. 30. INCLUDES WORK IN THE REST AREAS, WEIGH STATION, AND AT THE RAMPS WITH U.S.R. 224.

PROJECT EARTH DISTURBED AREA: N/A MAINT.
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A MAINT.
NOTICE OF INTENT EARTH DISTURBED AREA: N/A MAINT.

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.

2016 SPECIFICATIONS

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

I HEREBY APPROVED THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF U.S.R. 30 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES. RAMPS "A" AND "B" OF U.S.R. 224 WILL BE CLOSED TO TRAFFIC AND DETOURS WILL BE AS INDICATED ON SHEET 10.

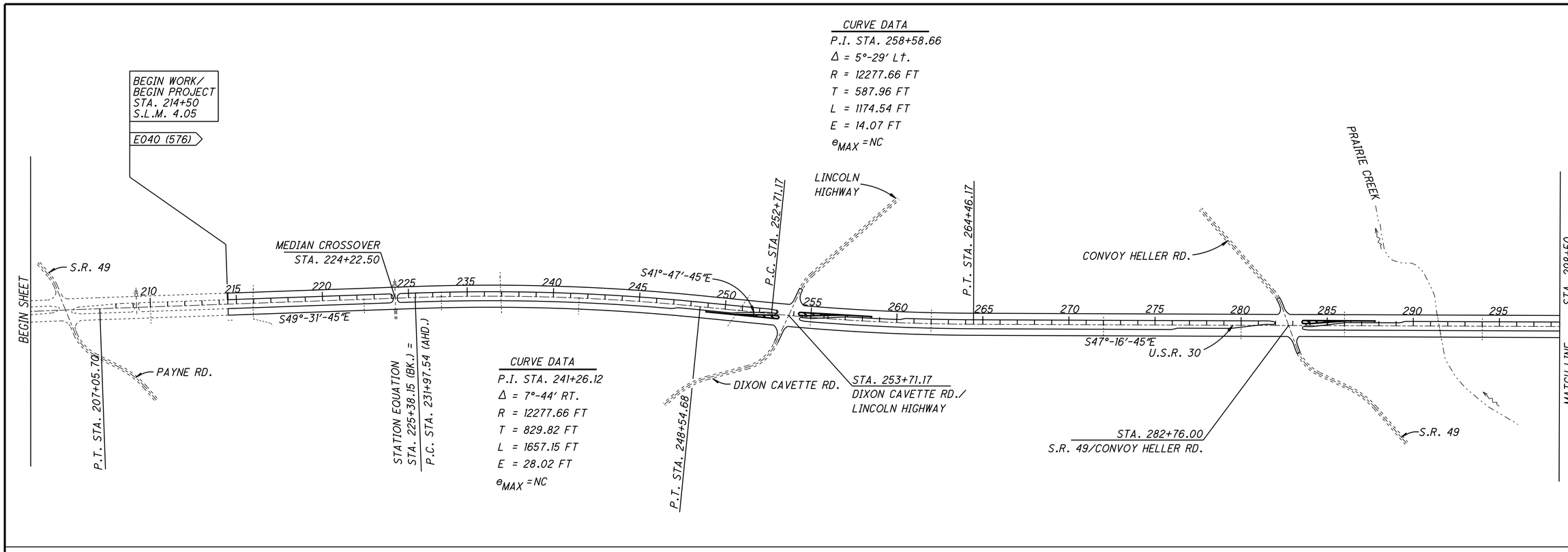
APPROVED Kirk Stuck
DATE 1/30/17 DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

STANDARD CONSTRUCTION DRAWINGS							SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS
BP-2.1	7/17/15	MT-98.30	1/20/17				800	4/21/17	
BP-2.2	7/18/08	MT-99.20	7/19/13						
BP-2.5	7/19/13	MT-101.90	7/17/15				808	1/20/17	
BP-3.1	7/18/14	MT-104.10	10/16/15				821	4/20/12	
BP-9.1	7/19/13	MT-105.10	7/19/13				832	1/17/14	
							908	1/29/16	
DM-4.3	1/15/16	TC-42.10	10/18/13				921	4/20/12	
DM-4.4	1/15/16	TC-42.20	10/18/13						
		TC-65.10	1/17/14						
MT-95.30	7/15/16	TC-65.11	7/15/16						
MT-98.10	1/20/17	TC-71.10	1/20/17						
MT-98.11	1/20/17	TC-72.20	7/15/16						
MT-98.20	7/18/14	TC-82.10	7/17/15						
MT-98.22	1/20/17								
MT-98.28	1/20/17								
MT-98.29	1/20/17								

FEDERAL PROJECT NO. E040 (576)
PID NO. 25261
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
VAN-30/224-4.05/11.44
1/16

170443 Conformed Set
Dist 1
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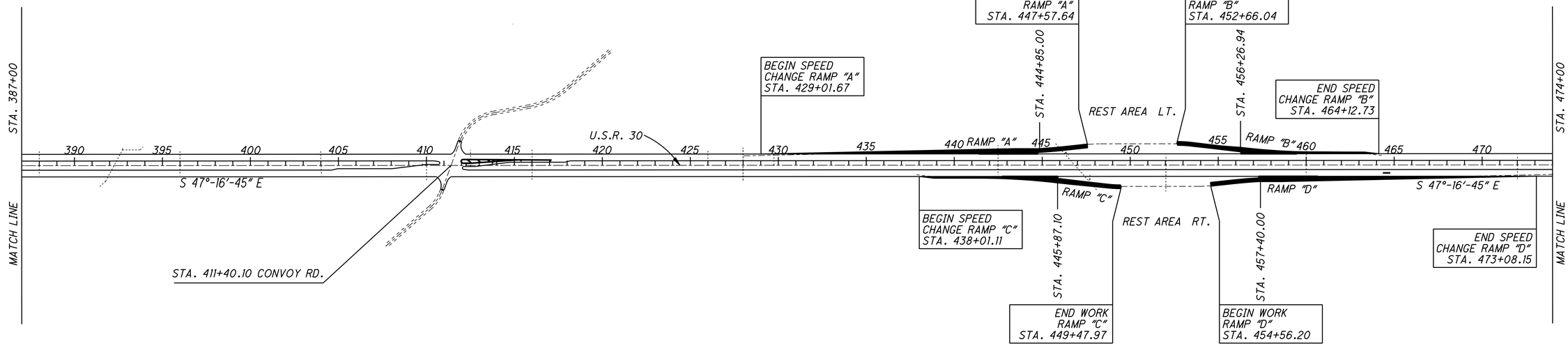
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HORIZONTAL SCALE IN FEET
0 150 300 600

CALCULATED JLG
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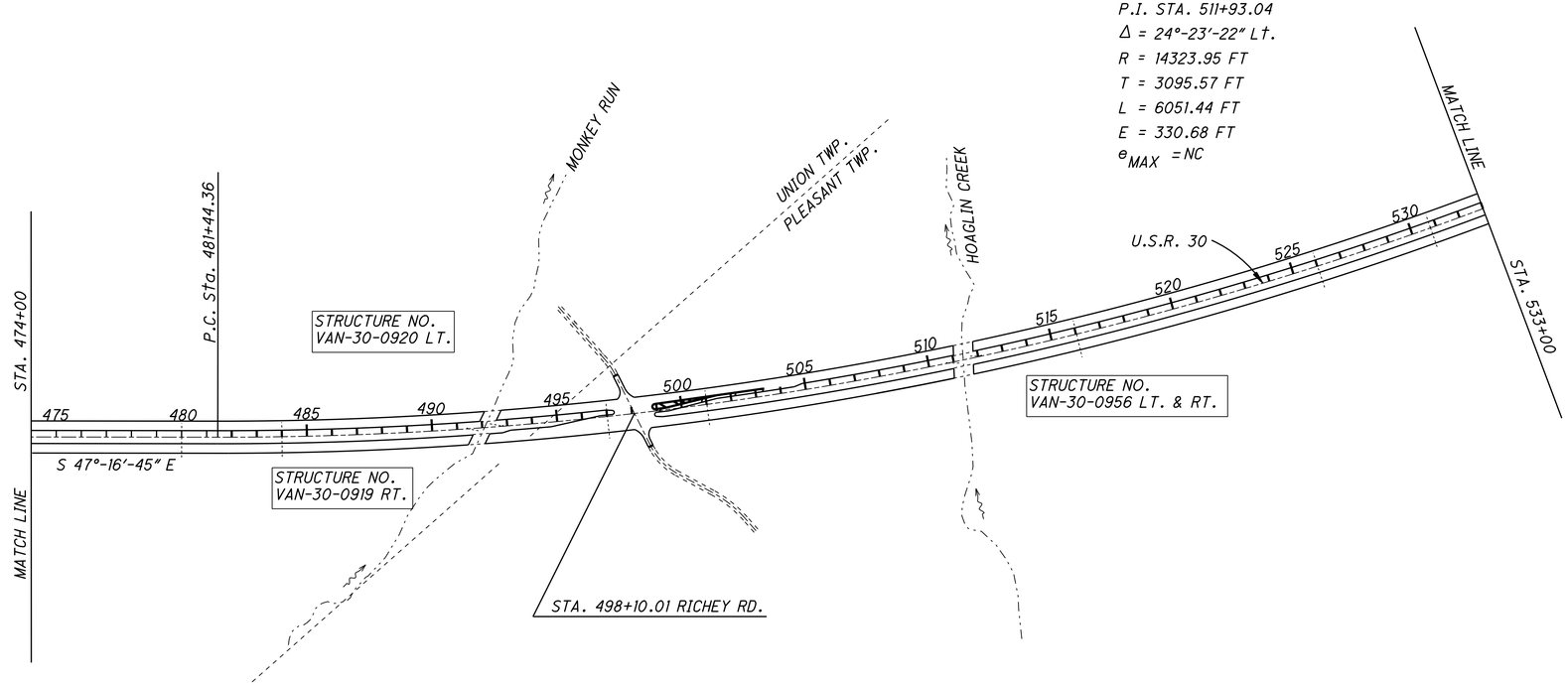
SCHEMATIC PLAN
STA. 207+05.70 TO STA. 387+00.00

VAN-30/224-4.05/11.44



- PARTICIPATION CODE 03/NFP/OT

CURVE DATA
P.I. STA. 511+93.04
Δ = 24°-23'-22" Lt.
R = 14323.95 FT
T = 3095.57 FT
L = 6051.44 FT
E = 330.68 FT
e_{MAX} = NC



HORIZONTAL SCALE IN FEET
0 150 300 600

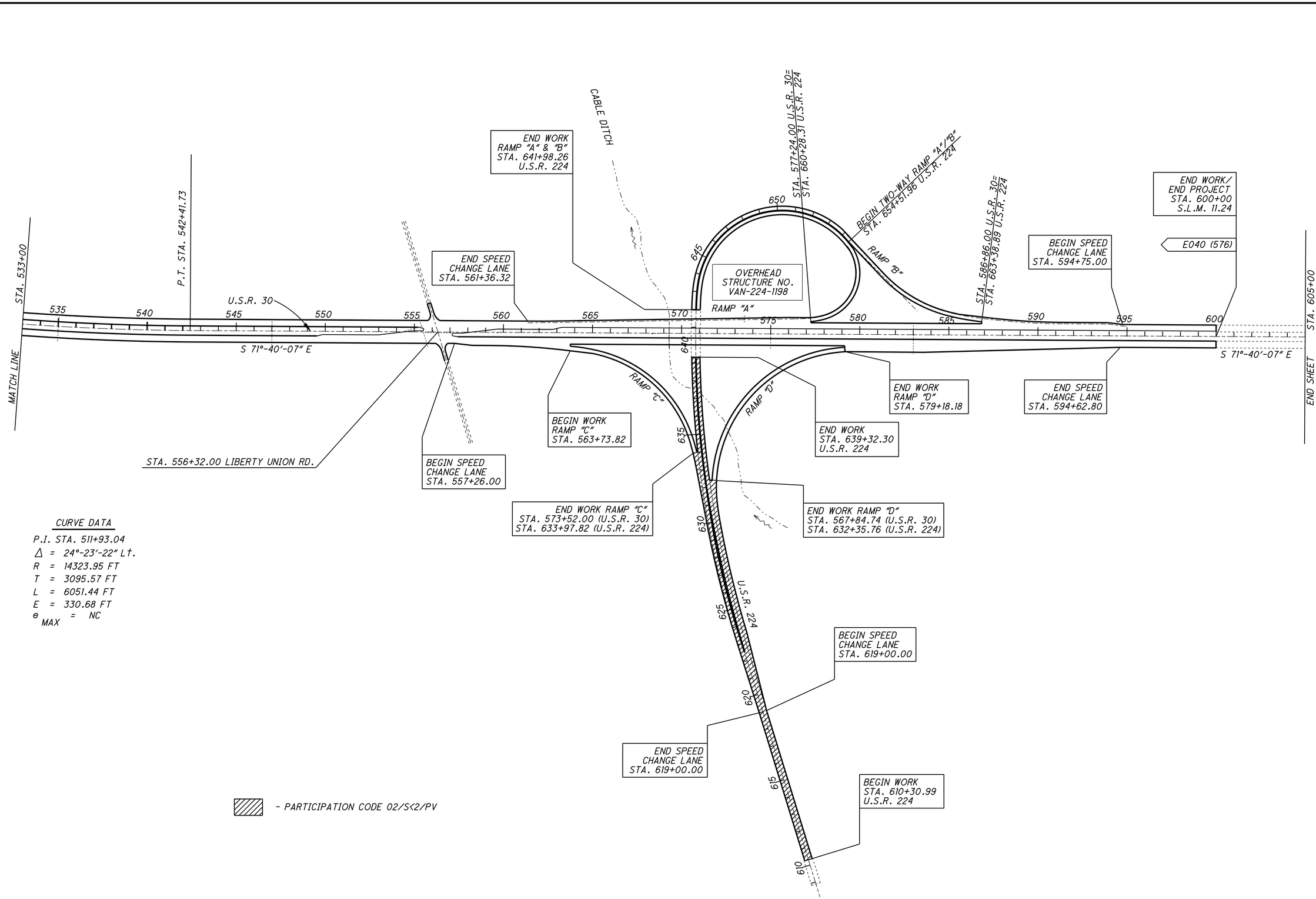
CALCULATED JLG
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SCHEMATIC PLAN
STA. 387+00.00 TO STA. 533+00.00

VAN-30/224-4.05/11.44

3
16

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CURVE DATA

P.I. STA. 511+93.04
Δ = 24°-23'-22" Lt.
R = 14323.95 FT
T = 3095.57 FT
L = 6051.44 FT
E = 330.68 FT
e_{MAX} = NC

▨ - PARTICIPATION CODE 02/S<2/PV

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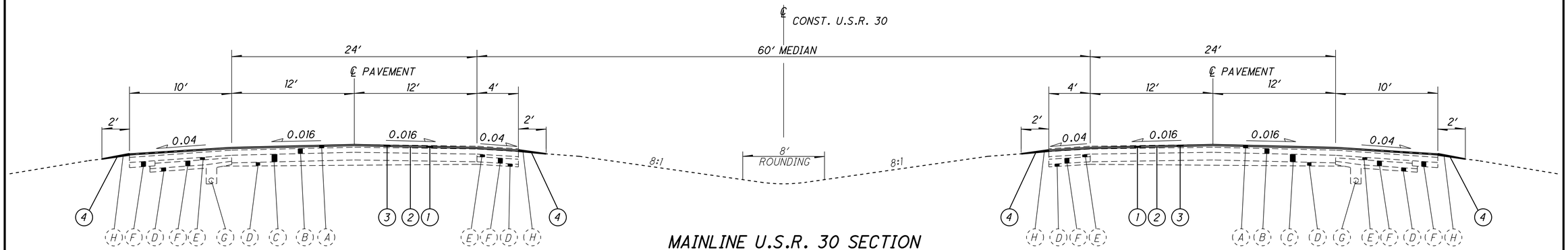
HORIZONTAL SCALE IN FEET
0 125 250 500

CALCULATED JLG
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SCHEMATIC PLAN
STA. 533+00.00 TO STA. 605+00.00

VAN-30/224-
4.05/11.44

4
15

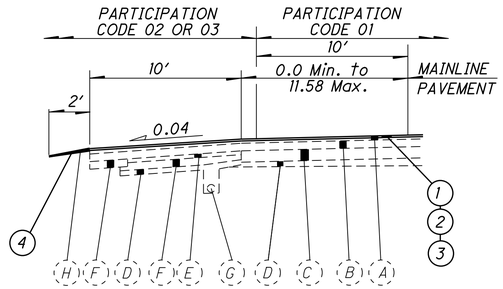


MAINLINE U.S.R. 30 SECTION

STA. 214+50.00 TO STA. 225+38.18 = 1088.18 FT.
STA. 231+97.54 TO STA. 600+00.00 = 36802.46 FT.
TOTAL = 37890.64 FT.

DEDUCT FOR MAINLINE BRIDGES:

*VAN-30-0580 RT. AND VAN-0581 LT. = 24.88 FT.
*VAN-30-0919 RT. AND VAN-0920 LT. = 66.74 FT.
*VAN-30-0956 RT. AND LT. = 79.52 FT.
TOTAL = 171.14 FT.



SPEED CHANGE LANE

WEIGH STATION
RAMP "A" STA. 330+26.04 TO STA. 338+09.88 = 783.84 FT. (03)
RAMP "B" STA. 355+50.00 TO STA. 372+00.00 = 1650.00 FT. (03)
REST AREA
RAMP "A" STA. 429+01.67 TO STA. 444+85.00 = 1583.33 FT. (03)
RAMP "B" STA. 456+26.94 TO STA. 464+12.73 = 785.79 FT. (03)
RAMP "C" STA. 438+01.11 TO STA. 445+87.10 = 785.99 FT. (03)
RAMP "D" STA. 457+40.00 TO STA. 473+08.15 = 1568.15 FT. (03)
U.S.R. 224
RAMP "A" STA. 561+36.32 TO STA. 577+24.00 = 1587.70 FT.
RAMP "B" STA. 586+86.00 TO STA. 594+75.00 = 789.00 FT.
BEGIN RAMP "C" STA. 557+26.00 TO STA. 563+73.82 = 647.82 FT. (03)
END RAMP "C" STA. 621+00.00 TO STA. 633+97.82 = 1297.82 FT. (02)
BEGIN RAMP "D" STA. 629+14.62 TO STA. 632+35.76 = 321.14 FT. (02)
END RAMP "D" STA. 579+18.18 TO STA. 594+62.80 = 1544.62 FT. (03)

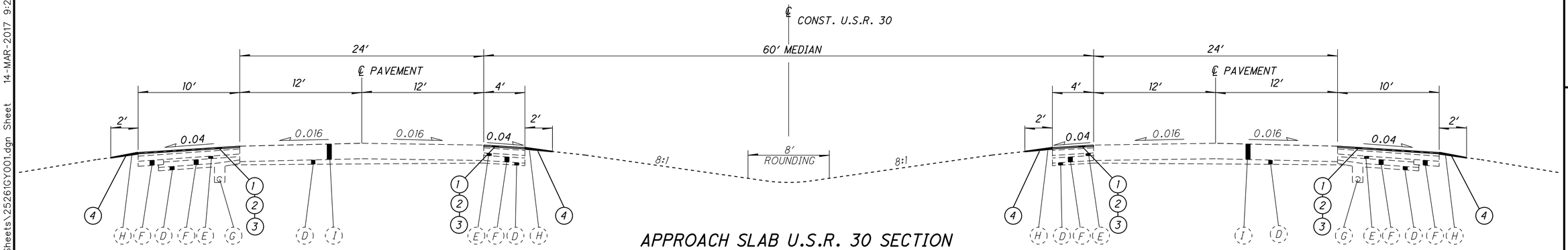
EXISTING LEGEND

(A) 3.25"± ASPHALT CONCRETE
(B) 6"± BITUMINOUS AGGREGATE BASE
(C) 9"± REINFORCED PORTLAND CONCRETE PAVEMENT
(D) VARIABLE SUBBASE
(E) 3"± WATERPROOFED AGGREGATE BASE
(F) 6"± AGGREGATE BASE
(G) 6" PIPE UNDERDRAINS
(H) COMPACTED AGGREGATE
(I) APPROACH SLAB

PROPOSED LEGEND

(1) ITEM 442 - 1 ½" ASPHALT CONCRETE SURFACE COURSE, 12.5mm, Type A (446), AS PER PLAN, (PG 70-22M)
(2) ITEM 407 - NON-TRACKING TACK COAT
(3) ITEM 254 - 1 ½" PAVEMENT PLANING, ASPHALT CONCRETE
(4) ITEM 617 - COMPACTED AGGREGATE (2" AVERAGE THICKNESS)

* - SEE PAVEMENT TABLE FOR STATIONS (SHEETS 12-13)
(02) - PARTICIPATION CODE 02/S<2/PV
(03) - PARTICIPATION CODE 03/NFP/OT



APPROACH SLAB U.S.R. 30 SECTION

MAINLINE BRIDGE APPROACH SLABS:

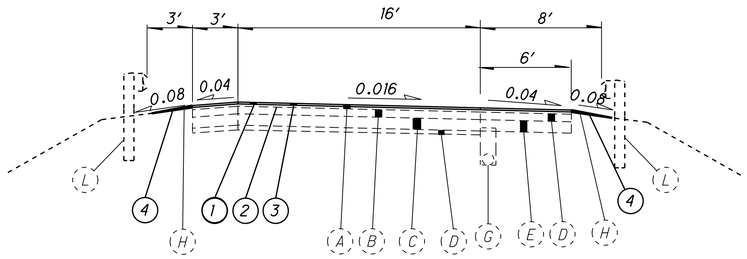
*VAN-30-0580 RT. AND VAN-0581 LT. = 50.00 FT.
*VAN-30-0919 RT. AND VAN-0920 LT. = 50.00 FT.
*VAN-30-0956 RT. AND LT. = 50.00 FT.
TOTAL = 150.00 FT.

TYPICAL SECTIONS

VAN-30/224-4.05/11.44

5
16

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RAMP TYPICAL

WEIGH STATION

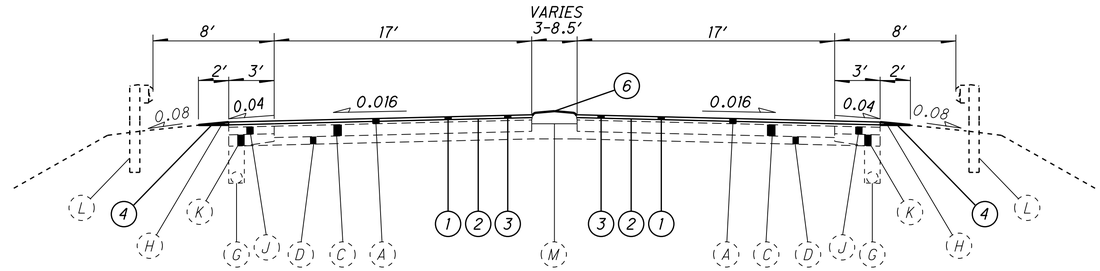
RAMP "A" STA. 338+09.88 TO STA. 345+11.00 = 701.12 FT. (03)
RAMP "B" STA. 346+29.00 TO STA. 355+50.00 = 921.00 FT. (03)

REST AREA

RAMP "A" STA. 444+85.00 TO STA. 447+57.64 = 272.64 FT. (03)
RAMP "B" STA. 452+66.04 TO STA. 456+26.94 = 360.90 FT. (03)
RAMP "C" STA. 445+87.10 TO STA. 449+47.97 = 360.87 FT. (03)
RAMP "D" STA. 454+56.20 TO STA. 457+40.00 = 283.80 FT. (03)

U.S.R. 224

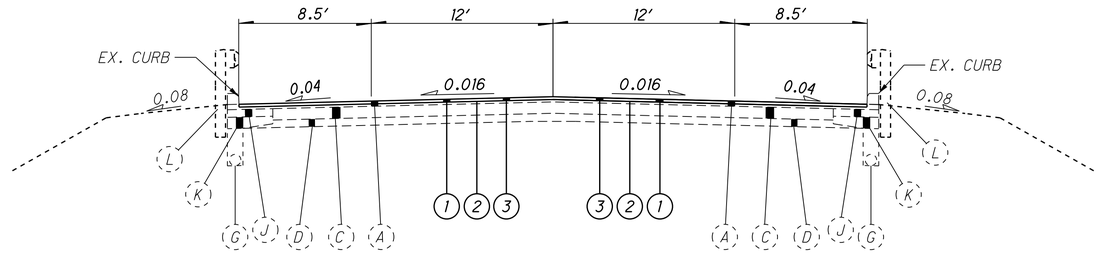
RAMP "A" STA. 654+51.96 U.S.R. 224 TO STA. 660+28.31 U.S.R. 224 = 576.35 FT.
RAMP "B" STA. 654+51.96 U.S.R. 224 TO STA. 663+38.89 U.S.R. 224 = 886.93 FT.
RAMP "C" STA. 563+73.82 TO STA. 573+52.00 = 978.18 FT.
RAMP "D" STA. 567+84.74 TO STA. 579+18.18 = 1133.44 FT.



TWO WAY RAMP

U.S.R. 224

RAMP "A"/"B" STA. 641+98.26 U.S.R. 224 TO STA. 654+51.96 U.S.R. 224 = 1253.70 FT.
RAMP "A"/"B" STA. 622+50.00 U.S.R. 224 TO STA. 639+32.30 U.S.R. 224 = 1682.3 FT. (02)



U.S.R. 224

U.S.R. 224 STA. 610+30.99 U.S.R. 224 TO STA. 622+50.00 U.S.R. 224 = 1219.01 FT. (02)

EXISTING LEGEND

- (A) 3.25"± ASPHALT CONCRETE
- (B) 6"± BITUMINOUS AGGREGATE BASE
- (C) 9"± REINFORCED PORTLAND CONCRETE PAVEMENT
- (D) VARIABLE SUBBASE
- (E) 3"± WATERPROOFED AGGREGATE BASE
- (F) 6"± AGGREGATE BASE
- (G) 6" PIPE UNDERDRAINS
- (H) COMPACTED AGGREGATE
- (J) 6"± WATERPROOFED AGGREGATE BASE
- (K) NO. 6 AGGREGATE
- (L) GUARDRAIL
- (K) MEDIAN CONCRETE CURB

PROPOSED LEGEND

- (1) ITEM 442 - 1 ½" ASPHALT CONCRETE SURFACE COURSE, 12.5mm, Type A (446), AS PER PLAN, (PG 70-22M)
- (2) ITEM 407 - NON-TRACKING TACK COAT
- (3) ITEM 254 - 1 ½" PAVEMENT PLANING, ASPHALT CONCRETE
- (4) ITEM 617 - COMPACTED AGGREGATE (2" AVERAGE THICKNESS)
- (6) ITEM 512 - SEALING OF CONCRETE SURFACES
  ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

(02) - PARTICIPATION CODE 02/S<2/PV
(03) - PARTICIPATION CODE 03/NFP/OT

TYPICAL SECTIONS

VAN-30/224-4.05/11.44

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GENERAL NOTES

UTILITIES

THERE ARE NO KNOWN COMMERCIAL UNDERGROUND UTILITIES SHOWN ON THIS PROJECT.

10" REINFORCED CONCRETE PAVEMENT WORK IN THE WEIGH STATION SHOWN ON SHEET 14 MAY HAVE CONFLICTS WITH THE EXISTING BURIED LINES TO POWER THE WEIGH STATION SIGNALIZATION. USE CAUTION WHEN COMPLETING THE EXCAVATION IN THIS AREA TO AVOID DAMAGE. ANY DAMAGE TO CABLES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

TO HAVE CABLES FIELD LOCATED CONTACT CURT SYBERT, ODOT DISTRICT 1 TRAFFIC MANAGER AT 419-231-2484 AT LEAST 48 HOURS IN ADVANCE.

PART-WIDTH CONSTRUCTION

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.

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.

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

SEEDING AND MULCHING, AS PER PLAN

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL CREATED WITH THE INSTALLATION OF THE SIDEWALK AT THE WEIGH STATION. AN ESTMATED QUANTITY BASED ON ONE FOOT OF DISTRUBANCE ALONG THE PROPOSED WALK HAS BEEN PROVIDED. SEEDING AND MULCHING, AS PER PLAN, INCLUDES ALL FERTILIZER AND WATER REQUIRED PER CMS 659.

THIS ITEM IS IN PARTICIPATION CODE 03/NFP/OT

EROSION CONTROL

THE QUANTITY BELOW HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR EROSION CONTROL.

ITEM 832 EROSION CONTROL - 1000 EACH

SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

THE CONTRACTOR SHALL SEAL ALL FACES OF THE EXISTING 3' WIDE CONCRETE MEDIAN IN THE FOLLOWING LOCATIONS ON THE U.S.R. 224 TWO-WAY RAMP. THE MEDIAN ON THE BRIDGE CARRYING U.S.R. 224 OVER U.S.R. 30 WAS SEALED IN A PREVIOUS PROJECT. WORK SHALL BE COMPLETED DURING THE PERMITED RAMP CLOSURES.

PARTICIPATION CODE 01/NHS/PV

STA. 641+98.26 TO STA. 654+51.96 = 1253.7 FT
3' (TOP) + 3.25" (2) (SIDES) = 3.54'
(3.54' X 1253.7')/9 = 493.1 SY

STA. 654+51.96 TO STA. 655+36.96 = 85 FT
TOP VARIES - 3' TO 13' WIDE = 8' AVERAGE
8' (TOP) + 3.25" (2) (SIDES) = 8.54'
(8.54' X 85')/9 = 80.7 SY

ITEM 512 SEALING OF CONCRETE SURFACES - 574 SY
(EPOXY-URETHANE)
PARTICIPATION CODE 01/NHS/PV

PARTICIPATION CODE 02/S<2/PV

STA. 622+50 TO STA. 625+00 = 250 FT
STA. 628+06 TO STA. 630+56 = 250 FT
TOP VARIES - 3' TO 8.5' WIDE = 5.75' AVERAGE
5.75' (TOP) + 3.25" (2) (SIDES) = 6.29'
(6.29' X 500')/9 = 349.4 SY

STA. 625+50 TO STA. 628+06 = 306 FT
TOP - 8.5' WIDE
8.5' (TOP) + 3.25" (2) (SIDES) = 9.04'
(9.04' X 306')/9 = 307.4 SY

STA. 630+56 TO STA. 639+32.3 = 876.3 FT
TOP - 3' WIDE
3' (TOP) + 3.25" (2) (SIDES) = 3.54'
(3.54' X 876.3')/9 = 344.7 SY

ITEM 512 SEALING OF CONCRETE SURFACES - 1002 SY
(EPOXY-URETHANE)
PARTICIPATION CODE 02/S<2/PV

EXISTING PLANS

EXISTING PLANS ENTITLED VAN-30-4.05 & VAN-30-6.618(4.05) MAY BE INSPECTED IN THE ODOT DISTRICT 1 OFFICE IN LIMA, OHIO.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

A ESTIMATED QUANTITY BELOW HAS BEEN PROVIDED TO REPAIR ANY DETERIORATED AREAS OF CONCRETE ON THE MEDIAN ON THE U.S.R. 224 TWO-WAY RAMP.

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING ANY EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

PAYMENT FOR ALL THE ABOVE SHALL BE AT THE UNIT PRICE BID PER SQUARE FOOT FOR ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, AND INCIDENTIALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN - 68 SF
PARTICIPATION CODE 01/NHS/PV

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN - 45 SF
PARTICIPATION CODE 02/S<2/PV

ITEM 632 - DETECTOR LOOP AND ITEM 625-CONNECTION, UNFUSED PERMANENT

A ESTIMATED QUANTITY HAS BEEN PROVIDED TO REPLACE THE DETECTOR LOOPS AT THE WEIGH STATION. THERE ARE 3 LOOPS LOCATED IN THE ENTRANCE RAMP PAVEMENT. IT IS ANTICIPATED THAT DURING THE PLANING PROCESS THESE LOOPS WILL BE DAMAGED OR REMOVED. LOOPS SHALL BE REPLACED AT THE EXISTING LOCATION IN ACCORDANCE WITH CMS 632 AND STANDARD CONSTRUCTION DRAWING TC-82.10. THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED TO REPLACE THE LOOPS AND RECONNECT TO THE EXISTING LOOP LEAD-IN CABLE.

ITEM 632 - DETECTOR LOOP	3 EACH
ITEM 625 - CONNECTION, UNFUSED PERMANENT	6 EACH

THESE ITEMS ARE IN PARTICIPATION CODE 03/NFP/OT

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 25 FT.. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. NOTIFY THE ODOT OFFICE OF AVIATION WHEN SUBMITTING AN FAA FORM 7460-1.

NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

EXPRESS PROCESSING CENTER THE FEDERAL AVIATION ADMINISTRATION SOUTHWEST REGIONAL OFFICE AIR TRAFFIC AIRSPACE BRANCH ASW-520 2601 MEACHAN BLVD. FORT WORTH, TX 76137-4298

OHIO DEPARTMENT OF TRANSPORTATION OFFICE OF AVIATION 2829 WEST DUBLIN-GRANVILLE ROAD COLUMBUS, OHIO 43235 614-387-2346

ITEM 202 - PAVEMENT REMOVED, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 202 FOR PAVEMENT REMOVED, THIS ITEM SHALL INCLUDE THE SAW CUT, REMOVAL AND DISPOSAL OF EXISTING PAVEMENT, SUBGRADE COMPACTION, SHAPING, AND SURFACE PREPARATION FOR THE NEW REINFORCED CONCRETE PAVEMENT. THE CONTRACTOR SHALL PREPARE THE SURFACE TO THE SATISFACTION OF THE ENGINEER.

THESE ITEMS ARE IN PARTICIPATION CODE 03/NFP/OT

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE A (446), AS PER PLAN, (PG 70-22M)

JOINT CORING AS PER 446.04 WILL NOT BE REQUIRED FOR ALL ASPHALT CONCRETE PLACED WITH COLD LONGITUDINAL JOINTS USING VOID REDUCING ASPHALT MEMBRANE (VRAM). THE CONTRACTOR WILL BE REQUIRED TO USE THE SAME COLD JOINT CONSTRUCTION TECHNIQUES, EQUIPMENT AND ROLLER PATTERNS USED ON THE REMAINDER OF PROJECT WHEN CONSTRUCTING ASPHALT CONCRETE IN THE VRAM SECTIONS. OBTAIN 10 MAT CORES FOR EACH LOT OF MATERIAL PER 446.04. PAY FACTORS FOR EACH LOT OF MATERIAL WILL BE DETERMINED PER TABLE 446.04-2.

ITEMS 253 - PAVEMENT REPAIR

THIS ITEM OF WORK SHALL CONSIST OF THE REMOVAL OF THE EXISTING MAINLINE ASPHALT PAVEMENT AREAS OR PAVED SHOULDER AREAS OF EXISTING PAVEMENT FAILURES NOT REPAIRED WITH ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC1, AS PER PLAN.

THE ENGINEER SHALL DESIGNATE THE LOCATIONS, DEPTHS, AND LIMITS OF THE AREAS TO BE REPAIRED. THE REPAIRS SHALL BE COMPLETED PRIOR TO THE PLANING OF THE ROADWAY. THE REPAIR AREAS SHALL BE ROUGHLY RECTANGULAR IN SHAPE. THE PAVEMENT SHALL BE REMOVED WITHIN THE DESIGNATED AREAS BY METHODS WHICH WILL NOT DAMAGE THE ADJACENT PAVEMENT. THE DEPTH OF REMOVAL, AS DIRECTED BY THE ENGINEER, SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT. THE MATERIALS SO REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 203.01.

ITEM 301 MATERIAL SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT EXISTING PAVEMENT SURFACE PRIOR TO PLANING AND PLACING THE PROPOSED ASPHALT CONCRETE OVERLAY. ALL COMPACTION SHALL BE ACHIEVED BY MECHANICAL METHODS TO THE SATISFACTION OF THE ENGINEER.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR. AN ESTIMATED QUANTITY IS PROVIDED IN THE SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER CUBIC YARD OF ITEM 253 PAVEMENT REPAIR.

ITEM 253 - PAVEMENT REPAIR 100 CY

ENVIRONMENTAL COMMITMENTS

THE ENVIRONMENTAL DOCUMENT WAS APPROVED 11/01/16 AND CONTAINED THE FOLLOWING CONSTRUCTION RELATED ITEMS THAT THE CONTRACTOR AND PROJECT ENGINEER ARE TO ENSURE ARE CARRIED OUT.

1. FULL CONTAINMENT OF CONSTRUCTION MATERIALS IS REQUIRED OVER ALL WATERWAYS.
2. NO WORK OR STAGING OF EQUIPMENT AND MATERIALS WILL OCCUR WITHIN A STREAM, WETLAND, DITCH, OR PUBLIC PARK AREA.
3. A PROPER CONCRETE WASHOUT AREA MUST BE PROVIDED BY THE CONTRACTOR.
4. THE CONTRACTOR MUST FOLLOW ODOT CMS (107.10) IN ORDER TO ENSURE STAGING, STORAGE, WASTE, AND BORROW AREAS ARE APPROPRIATELY CITED.

ITEM 202 PAVEMENT REMOVAL

THE EXISTING DETERIORATED PAVEMENT ALONG RAMP "D" ON U.S.R. 224 SHALL BE REMOVED. AN ADDITIONAL QUANTITY OF ITEM 617 COMPACTED AGGREGATE HAS BEEN PROVIDED BELOW TO RESTORE THE AREA.

ITEM 202 PAVEMENT REMOVED, ASPHALT	300 SY
ITEM 617 COMPACTED AGGREGATE	25 CY

THESE ITEMS ARE IN PARTICIPATION CODE 01/NHS/PV

PAVING ON U.S.R. 224 RAMPS "A" AND "B"

SINCE RAMPS "A" AND "B" ON U.S.R. 224 WILL BE CLOSED DURING THE PAVING PROCESS, THE CONTRACTOR SHALL COMPLETE HIS PAVING OPERATIONS TO ELIMINATE THE COLD LONGITUDINAL JOINT IN THE PAVEMENT.

VAN-30/224-4.05/11.44

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ITEM 690 SPECIAL - VOID REDUCING ASPHALT MEMBRANE (VRAM)

GENERAL:
AS PART OF THIS PROJECT, THE CONTRACTOR WILL BE REQUIRED TO CONSTRUCT SECTIONS OF COLD LONGITUDINAL JOINTS USING VOID REDUCING ASPHALT MEMBRANE (VRAM) MATERIAL AT SPECIFIED LOCATIONS. PROVIDE ADDITIONAL CORES SAMPLES, LOOSE MIX SAMPLES AND LIQUID MATERIAL SAMPLES AS DIRECTED BY THE ENGINEER. CONSTRUCT ALL SURFACE COURSE COLD LONGITUDINAL JOINTS FROM STA. 267+30 TO STA. 600+00 U.S.R. 30 ONLY USING VRAM MATERIAL AND CONFORMING WITH THE FOLLOWING REQUIREMENTS.

MATERIALS:
PROVIDE J-BAND PRODUCED BY ASPHALT MATERIALS, INC. OR OTHER APPROVED ASPHALT MATERIAL AS FOLLOWS:

PROVIDE A BASE ASPHALT MODIFIED WITH STYRENE-BUTADIENE DIBLOCK OR TRIBLOCK COPOLYMER WITHOUT OIL EXTENSION, OR A STYRENE-BUTADIENE RUBBER ELASTOMERS. DO NOT USE AIR BLOWN ASPHALT, ACID MODIFICATION, OR OTHER MODIFIERS.

TEST	TEST REQUIREMENT	TEST METHOD
DYNAMIC SHEAR @ 82°C (UNAGED), G*/SIN δ, KPA	1.00 MIN.	AASHTO T 315
CREEP STIFFNESS @ -18°C (UNAGED), STIFFNESS (S), MPA		
M-VALUE	300 MAX.	
	0.300 MIN.	AASHTO T 313
ASH, %	6.0 MAX.	AASHTO T 111
ELASTIC RECOVERY, 100 MM ELONGATION, CUT IMMEDIATELY, 25°C, %	58 MIN.	AASHTO T301
SEPARATION OF POLYMER, DIFFERENCE IN °C OF THE SOFTENING POINT (RING AND BALL)	3 MAX.	ASTM D7173, AASHTO T53
MIGRATION OF VRAM, %	50-75	ITM XYZ

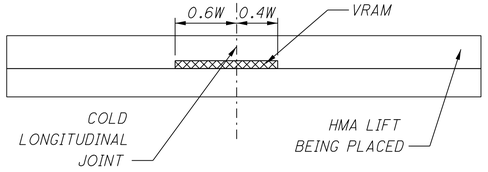
EQUIPMENT:
WHEN A PRESSURE DISTRIBUTOR IS USED TO APPLY THE VRAM, EQUIP THE DISTRIBUTOR WITH A HEATING AND RECIRCULATING SYSTEM ALONG WITH A FUNCTIONING AUGER AGITATING SYSTEM OR VERTICAL SHAFT MIXER IN THE HAULING TANK TO PREVENT LOCALIZED OVERHEATING.

WHEN A MELTER KETTLE IS USED TO TRANSPORT AND APPLY THE VRAM, USE ONLY OIL JACKETED DOUBLE-BOILER MELTER KETTLES WITH AGITATING AND RECIRCULATING SYSTEMS. MATERIAL FROM THE KETTLE MAY BE DISPENSED THROUGH A PRESSURE FEED WAND WITH AN APPLICATOR SHOE OR THROUGH A PRESSURE FEED WAND INTO A HAND-OPERATED THERMAL PUSH CART.

PREPARATION OF SURFACE:
PRIOR TO PLACING VRAM, CLEAN THE PAVEMENT SURFACE AREA TO BE TREATED OF ALL FOREIGN MATERIALS DEEMED DETRIMENTAL BY THE ENGINEER. ONLY APPLY VRAM TO SURFACES THAT ARE DRY AND CLEANED OF ALL DUST, DEBRIS, AND ANY SUBSTANCES THAT WILL PREVENT THE VRAM FROM ADHERING. THE VRAM MAY BE PLACED BEFORE OR AFTER THE TACK COAT PLACEMENT. WHEN PLACED AFTER THE TACK COAT, ENSURE THE TACK COAT IS FULLY CURED PRIOR TO PLACEMENT OF THE VRAM.

APPLICATION OF VRAM:
APPLY VRAM TO COLD LONGITUDINAL JOINTS UNDER SURFACE COURSES. ONLY APPLY VRAM WHEN THE PAVEMENT SURFACE TEMPERATURE AND THE AMBIENT TEMPERATURE ARE A MINIMUM OF 40 °F AND RISING.

APPLY VRAM MATERIAL ON THE COLD LONGITUDINAL JOINT AS DETAILED BELOW:



APPLY VRAM AT THE WIDTH AND APPLICATION RATE REQUIRED ACCORDING TO THE FOLLOWING TABLE:

VRAM APPLICATION RATE TABLE

OVERLAY THICKNESS, (in.)	VRAM WIDTH, "W", (in.)	APPLICATION RATE, [1] (lb/ft)
HMA MIXTURES [2]		
1	15	0.95
1 1/4	15	1.09
1 1/2	15	1.22
1 3/4	15	1.36
2	15	1.49
2 1/4	15	1.62
2 1/2	15	1.76
2 3/4	15	1.89
3	15	2.03
3 1/4	15	2.16
3 1/2	15	2.30
3 3/4	15	2.43
4	15	2.57
SMA MIXTURES [2]		
1 1/2	12	0.83
1 3/4	12	0.92
2	12	1.00

[1] THE APPLICATION RATE HAS A SURFACE DEMAND FOR LIQUID INCLUDED WITHIN IT. THE NOMINAL THICKNESS OF THE VRAM MAY TAPER FROM THE CENTER OF THE APPLICATION TO A LESSER THICKNESS ON THE EDGE OF THE APPLICATION. THE WIDTH AND WEIGHT/FOOT SHALL BE MAINTAINED.

[2] IN THE EVENT OF A JOINT BETWEEN AN SMA AND HMA MIXTURE, THE SMA APPLICATION RATE WILL BE USED.

APPLY VRAM IN A SINGLE PASS WITH A PRESSURE DISTRIBUTOR, MELTER KETTLE, OR HAND APPLIED FROM A ROLL, FOR ASPHALT COURSES UP TO 2 IN. (50 MM) IN THICKNESS. APPLY VRAM IN TWO PASSES FOR ASPHALT COURSES BETWEEN 2 AND 4 IN. (50 AND 100 MM) IN THICKNESS. ENSURE THE APPLIED WIDTH OF VRAM IS WITHIN ±1.5 IN. (38 MM) OF THE WIDTH SPECIFIED. IF THE VRAM FLOWS MORE THAN 2 IN. (50 MM) FROM THE INITIAL PLACEMENT WIDTH, IMMEDIATELY STOP PLACEMENT OF VRAM AND PERFORM CORRECTIVE ACTIONS. COORDINATE THE APPLICATION OF VRAM AND PLACEMENT OF THE ASPHALT MIXTURE TO ENSURE THE CENTER OF THE VRAM APPLICATION IS WITHIN ±2.0 IN. (50 MM) OF THE CENTER OF THE ASPHALT PAVEMENT COLD JOINT BEING CONSTRUCTED.

IF THE VRAM MATERIAL WILL BE EXPOSED TO TRAFFIC PRIOR TO CLOSING THE LONGITUDINAL JOINT, SHIFT THE LOCATION OF THE CENTERLINE OF THE VRAM MATERIAL ABOUT THE JOINT CENTERLINE SUCH THAT NO MORE THAN A NOMINAL 6 IN (152 MM) OF MATERIAL IS EXPOSED. DO NOT OPEN TO TRAFFIC IF WIDTH OF EXPOSED VRAM MATERIAL IS GREATER THAN 6 IN. (152 MM).

IF THE PAVING OPERATION ONLY ALLOWS VRAM TO BE PLACED ON ONE SIDE OF THE COLD LONGITUDINAL JOINT AT A TIME, COAT THE VERTICAL FACE OF THE COLD LONGITUDINAL JOINT WITH VRAM MATERIAL IN ADDITION TO THE REQUIREMENTS ABOVE. DO NOT SEAL THE FACE OF COLD LONGITUDINAL JOINTS AS REQUIRED PER 401.17 WHEN USING VRAM FOR THE COLD LONGITUDINAL JOINT.

FURNISH A BILL OF LADING FOR EACH TANKER SUPPLYING MATERIAL TO THE PROJECT. VERIFY THE APPLICATION RATE OF VRAM WITHIN THE FIRST 1000 FT. (305 M) OF THE DAY'S SCHEDULED APPLICATION LENGTH AND EVERY 6000 FT. (1829 M) THE REMAINDER OF THE DAY. FOR PROJECTS LESS THAN 3000 FT. (914 M), THE RATE WILL BE VERIFIED ONCE. PLACE A SUITABLE PAPER OR PAN AT A RANDOM LOCATION IN THE PATH OF THE PLACEMENT FOR THE VRAM. AFTER APPLICATION OF THE VRAM, PICK UP THE PAPER OR PAN AND OBTAIN THE WEIGHT OF MATERIAL. CALCULATE THE WEIGHT PER FOOT OF VRAM. ENSURE THE ACTUAL WEIGHT PER FOOT OF VRAM IS WITHIN ± 15 PERCENT OF THE TARGET WEIGHT/FOOT FROM THE VRAM APPLICATION RATE TABLE. REPLACE THE VRAM IN THE AREAS WHERE THE SAMPLES ARE TAKEN.

WHEN BEGINNING PLACEMENT OF A RUN OF VRAM, USE A SUITABLE RELEASE PAPER TO COVER PREVIOUS VRAM APPLICATION TO PREVENT DOUBLING UP OF THICKNESS OF VRAM.

THE VRAM MUST BE SUITABLE FOR CONSTRUCTION TRAFFIC TO DRIVE ON WITHOUT PICKUP OR TRACKING WITHIN 30 MINUTES OF PLACEMENT. IF PICKUP OR TRACKING OCCURS, IMMEDIATELY STOP PLACEMENT OF VRAM AND REPAIR DAMAGED AREAS.

PRIOR TO START OF PAVING, ENSURE THE PAVER END PLATE AND ANY GRADE CONTROL DEVICES ARE ADEQUATELY RAISED ABOVE THE FINISHED HEIGHT OF THE VRAM.

IMMEDIATELY STOP PLACEMENT OF ASPHALT MIXTURE AND VRAM IF FLUSHING IS NOTED IN THE ASPHALT SURFACE. DO NOT CONTINUE PLACEMENT OF THE ASPHALT MIXTURE UNTIL THE ISSUE IS CORRECTED.

METHOD OF MEASUREMENT. THE DEPARTMENT WILL MEASURE VRAM BY THE NUMBER OF FEET (METERS) COMPLETED AND ACCEPTED IN PLACE.

BASIS OF PAYMENT. DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE AS FOLLOWS:

ITEM	UNIT	DESCRIPTION
690E98100	FOOT (METER)	SPECIAL - VOID REDUCING ASPHALT MEMBRANE (VRAM)

STA. 267+30 TO STA. 600+00 U.S.R. 30=33270 FT*2= 66540 FT.

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GENERAL NOTES

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ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN

THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE ELEVEN (11) FOOT LANE OF TRAFFIC IN EACH DIRECTION AT ALL TIMES ON MAINLINE U.S.R. 30 IN ACCORDANCE WITH THE REQUIREMENTS OF SPEC. 614 AND THESE MAINTENANCE OF TRAFFIC NOTES. ALL SIDE ROADS ENTERING U.S.R. 30 AT AT-GRADE INTERSECTIONS SHALL REMAIN OPEN AT ALL TIMES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ORGANIZE HIS/HER WORK IN SUCH A MANNER TO PROVIDE THE MOST SAFETY WITH THE LEAST INCONVENIENCE TO THE TRAVELING PUBLIC.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS ON U.S.R. 30 SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. A CLOSED LANE WITH NO FURTHER PATCHING REQUIRED AND NO PAVING/PLANING OPERATIONS SCHEDULED WITHIN FOUR (4) CALENDAR DAYS SHALL BE OPENED FOR THE CONVENIENCE OF THE TRAVELING PUBLIC. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATED WITH THE WORK IN PROGRESS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTING AND MAINTAINING SAFE AND EFFECTIVE TRAFFIC CONTROL 24 HOURS A DAY FOR THE DURATION OF THIS PROJECT. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR. THIS CONSISTS OF NOTIFYING THE OHIO STATE PATROL AFTER ENCOUNTERING ANY ACCIDENTS OR DISABLED VEHICLES OR OBJECTS HINDERING THE FLOW OF TRAFFIC.

THE CONTRACTOR SHALL DESIGNATE TO THE ENGINEER, A PERSON RESPONSIBLE FOR MAINTENANCE OF TRAFFIC CONTROL DURING NON-WORK HOURS WHO SHALL BE AVAILABLE ON SITE WITHIN THIRTY (30) MINUTES AFTER NOTIFICATION.

UNLESS PHYSICALLY IMPOSSIBLE, ALL CONSTRUCTION EQUIPMENT SHALL EXIT ALL WORK ZONES FROM THE DOWNSTREAM END OF THE WORK ZONE OR BY INTERCHANGE RAMPS.

UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO DIRECTLY TRANSPORT OR OPERATE EQUIPMENT ACROSS THE OPEN LANES OF U.S.R. 30. THE CONTRACTOR WILL NOT BE PERMITTED TO UTILIZE THE EMERGENCY TURNAROUNDS AS PART OF THE HAUL ROUTE.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL ITEMS, LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THESE REQUIREMENTS AND DEEMED NECESSARY BY THE ENGINEER SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN.

REMOVAL OF PAVEMENT MARKING

THE CONTRACTOR SHALL REMOVE ALL CONFLICTING PAVEMENT MARKINGS ALONG THE WORK ZONE. THE CONTRACTOR SHALL ORGANIZE HIS WORK TO REQUIRE ONLY THE REMOVAL OF CONFLICTING PAVEMENT MARKINGS ALONG ONE LANE IN EACH DIRECTION OF THE ROADWAY. THE LINE TYPE MAY VARY THROUGHOUT THE ZONE. PAYMENT TO REMOVE THESE MARKINGS AND ANY OTHER CONFLICTING MARKINGS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN.

WORK ZONE MARKINGS AND SIGNS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS AND SIGNS PER THE REQUIREMENTS OF C&MS 614.04 AND 614.11.

ITEM 614 - WORK ZONE LANE LINE, CLASS I	- 14.40 MI
ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I	- 0.65 MI
ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 740.06, TYPE I	- 3,430 FT
ITEM 614 - WORK ZONE SIGNS NO EDGE LINE SIGNS	- 34 EACH

CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE

IN ADDITION TO THE REQUIREMENTS OF SECTION 614.03 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, THE FOLLOWING SHALL APPLY.

THE CONTRACTOR'S EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC WHERE PRACTICAL.

NO EQUIPMENT SHALL BE PARKED BEHIND A GUARDRAIL ATTENUATOR.

AT TIMES OF SUSPENSION OF WORK, EQUIPMENT SHALL BE STORED AT A STORAGE AREA REMOVED FROM THE RIGHT OF WAY. NO EQUIPMENT SHALL BE PARKED IN THE MEDIAN OF THE HIGHWAY EXCEPT WHEN TRAFFIC IS MAINTAINED ON THE OUTSIDE LANES.

ADEQUATE BARRELS SHALL BE PLACED ON THE PAVEMENT SIDE OF THE EQUIPMENT TO IDENTIFY THE LIMITS OF THE EQUIPMENT.

ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT THE APPROVED CONTRACTOR'S STORAGE AREA.

REST AREA CLOSURES

THE REST AREAS ARE PERMITTED TO BE CLOSED TO THE TRAVELING PUBLIC FOR A MAXIMUM OF 10 CONSECUTIVE CALENDAR DAYS EACH. THE 10 DAY CLOSURE FOR THE EASTBOUND REST AREA MAY BE CONCURRENT, STAGGERED, OR UNRELATED TO THE 10 DAY CLOSURE FOR THE WESTBOUND REST AREA. EACH 10 DAY CLOSURE MAY ONLY SPAN ONE (1) WEEKEND. CLOSURE OF THE REST AREAS MAY NOT OCCUR ON OR WITHIN 2 DAYS OF LABOR DAY. ALL REST AREA WORK, INCLUDING ITEM 642 PAVEMENT MARKINGS, MUST BE COMPLETED DURING EACH 10 DAY CLOSURE. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF $1000 PER DAY FOR EACH CALENDAR DAY EACH REST AREA REMAINS CLOSED TO THE TRAVELING PUBLIC BEYOND THE SPECIFIED LIMIT. THE CONTRACTOR SHALL PROVIDE MOTORISTS 7 DAYS ADVANCE NOTICE OF THE PLANNED REST AREA CLOSURES THROUGH THE USE OF A PORTABLE, CHANGEABLE MESSAGE SIGN. THE CONTRACTOR SHALL COVER EXISTING REST AREA GUIDE SIGNS WITH A CLOSED OVERLAY SIGN AND PROVIDE THE APPROPRIATE TRAFFIC CONTROL TO CLOSE THE REST AREA ENTRANCE AND EXIT RAMPS AS PER SCD MT-98.29. THE ODOT ENGINEER SHALL NOTIFY THE ODOT FACILITIES DEPARTMENT (TONY LOTZ AT 419-296-5780) AT LEAST 30 DAYS IN ADVANCE OF THE CLOSURES. 2 DAYS PRIOR TO REOPENING ANY REST AREA CONTACT ODOT FACILITIES FOR REST AREA CLEANING AND RESTOCKING. PAYMENT SHALL BE INCLUDED IN ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN.

ALTERNATE METHODS

IF THE CONTRACTOR SO ELECTS, THEY MAY SUBMIT ALTERNATE METHODS FOR MAINTENANCE OF TRAFFIC PROVIDED THE INTENT OF THE ABOVE PROVISIONS ARE FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THERE FROM. NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED, IN WRITING, BY THE DISTRICT CONSTRUCTION ENGINEER. ALLOW 2 WEEKS FOR REVIEW WITH NO DELAY TO THE PROJECT. NO ADDITIONAL MONEY WILL BE PAID FOR ALTERNATE METHODS.

MAINTAINING TRAFFIC AT PLANED AND PAVED AREAS

THE CONTRACTOR SHALL ARRANGE OPERATIONS SO THAT TRAFFIC IS RETURNED TO AN AREA WHEN PAVING IS COMPLETE. NO U.S.R. 30 TRAFFIC SHALL BE ALLOWED TO OPERATE ON A PLANED SURFACE. ALL REQUIRED WORK ZONE PAVEMENT MARKING SHALL BE PLACED PRIOR TO OPENING THE AREA TO TRAFFIC.

MAINTAINING TRAFFIC NEAR RUMBLE STRIPS

TRAFFIC IS NOT PERMITTED TO RUN ON OR CROSS OVER ANY RUMBLE STRIPS AT ANY TIME. RUMBLE STRIPS MUST BE FILLED WHEN THEY CONFLICT WITH THE MAINTENANCE OF TRAFFIC LANE CONFIGURATION. THIS INCLUDES LOCATIONS OF LANE SHIFTS ENTERING AND EXITING THE ZONE. THE RUMBLE STRIPS SHALL BE FILLED OR ELIMINATED BY PLANING AND PAVING TO PROVIDE A SMOOTH RIDE TO THE SATISFACTION OF THE PROJECT ENGINEER. ONCE TRAFFIC IS RETURNED TO IT FINAL LANE CONFIGURATION, THE RUMBLE STRIPS THAT WERE REMOVED IN ANY EXISTING PAVEMENT SHALL BE RESTORED TO THE PRE-CONSTRUCTION CONDITION TO THE SATISFACTION OF THE ENGINEER.

THE CONTRACTOR SHALL SEQUENCE HIS OPERATIONS TO CONFORM TO ONE OF THE FOLLOWING OPTIONS:

IF THE CONTRACTOR CHOOSES TO SEQUENCE HIS WORK SO THAT WORK ON THE PASSING LANE AND 4-FOOT SHOULDER OCCURS PRIOR TO THE DRIVING LANE AND 10-FOOT SHOULDER, THEN THE CONTRACTOR IS PERMITTED TO LEAVE THE RUMBLE STRIPS IN PLACE ON THE 10-FOOT SHOULDER UNFILLED AS THE TRAFFIC CAN STRADDLE THE RUMBLE STRIPS. THE CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED AND THE ZONE SHALL BE SET UP AS SHOWN IN THE DETAIL BELOW. CONFLICTING RUMBLE STRIPS WITHIN THE LANE SHIFTS AND AT THE EXIT AND ENTRANCE RAMPS MUST BE FILLED OR REMOVED AS DESCRIBED ABOVE.

IF THE CONTRACTOR CHOOSES TO SEQUENCE HIS WORK SO THAT WORK ON THE DRIVING LANE AND 10-FOOT SHOULDER OCCURS PRIOR TO THE PASSING LANE AND 4-FOOT SHOULDER, THEN THE CONTRACTOR MUST FILL OR REMOVE THE RUMBLE STRIPS ON THE 4-FOOT SHOULDER PRIOR TO CLOSING THE LANE. CONFLICTING RUMBLE STRIPS WITHIN THE LANES SHIFTS MUST ALSO BE FILLED OR REMOVED. THE CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED.

PAYMENT FOR ALL MATERIALS, LABOR, AND EQUIPMENT NECESSARY TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN.

ITEM 614, REPLACEMENT SIGN

FLAT SHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

AN ESTIMATED QUANTITY OF 5 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

AN ESTIMATED QUANTITY OF 50 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

LANE CLOSURES

THE CONTRACTOR SHALL PROVIDE AN ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN IN ADVANCE WARNING OF ANY LANE CLOSURES. SEE NOTE ON SHEET 10.

WEIGH STATION CLOSURE

THE WEIGH STATION IS PERMITTED TO BE CLOSED TO THE TRAVELING PUBLIC FOR A MAXIMUM OF 14 CONSECUTIVE DAYS. ALL WEIGH STATION WORK, INCLUDING ITEM 642 PAVEMENT MARKINGS, MUST BE COMPLETED DURING THE 14 DAY CLOSURE. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF $1000 PER DAY FOR EACH CALENDAR DAY THE WEIGH STATION REMAINS CLOSED TO THE TRAVELING PUBLIC BEYOND THE SPECIFIED LIMIT. THE CONTRACTOR SHALL PROVIDE THE STATE HIGHWAY PATROL 14 DAYS ADVANCE NOTICE OF THE WEIGH STATION CLOSURES BY CONTACTING SERGEANT WILL OGDEN AT 419-421-5340. THE CONTRACTOR SHALL PROVIDE THE APPROPRIATE TRAFFIC CONTROL TO COMPLETELY CLOSE THE WEIGH STATION RAMPS AS PER SCD MT-98.29. PAYMENT SHALL BE INCLUDED IN ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN.

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MAINTENANCE OF TRAFFIC GENERAL NOTES

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ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 64 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

WORK ZONE INCREASED PENALTIES SIGN (R11-H5A)

R11-H5A-48 SIGNS SHALL BE FURNISHED, ERECTED, AND MAINTAINED IN GOOD CONDITION AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED BY THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY CRITERIA.

THE SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY LANE RESTORATIONS SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR 30 OR MORE CONSECUTIVE CALENDAR DAYS, SUCH AS DURING WINTER SHUT-DOWNS.

THE SIGNS ON THE MAINLINE SHALL BE DUAL MOUNTED UNLESS NOT PHYSICALLY POSSIBLE. THE FIRST SIGN SHALL BE PLACED BETWEEN THE ROAD WORK AHEAD (W20-1) SIGN AND THE NEXT SIGN IN THE SEQUENCE. SIGNS SHALL BE ERECTED ON EACH ENTRANCE RAMP AND EVERY 2 MILES THROUGH THE CONSTRUCTION WORK LIMITS. SIGNS ON THE MAINLINE SHALL BE R11-H5A-48. SIGNS USED ON THE RAMPS SHALL BE R11-H5A-24. R11-H5A-24 SIGNS MAY BE USED IN THE MEDIAN IN LIEU OF R11-H5A-48 SIGNS IF IT IS NOT PHYSICALLY POSSIBLE TO PROVIDE R11-H5A-48 SIGNS IN THE MEDIAN.

THE R11-H5A-48 SIGNS SHALL BE MOUNTED ON 2 NO. 3 POSTS WHEN LOCATED WITHIN CLEAR ZONES.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE RETROREFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF C&MS 730.19.

WORK ZONE INCREASED PENALTIES SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVAL OF THE SIGN AND SUPPORT.

ITEM 614, WORK ZONE INCREASED PENALTIES SIGN - 34 EACH

ITEM 614, WORK ZONE SPEED ZONES (WZSZS)

THE FOLLOWING WORK ZONE SPEED ZONE (WZSZ) SPEED LIMIT REVISION(S) HAVE BEEN APPROVED FOR USE ON THIS PROJECT WHEN WORK ZONE CONDITIONS AND FACTORS ARE MET AS DESCRIBED BELOW:

WZSZ REVISION NUMBER	COUNTY & ROUTE	DIRECTION
WZ- 10120	VAN WERT U.S.R. 30	EB & WB

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRE-CONSTRUCTION) POSTED SPEED LIMIT OF 55 MPH OR GREATER, A QUALIFYING WORK ZONE CONDITION OF AT LEAST 0.5 MILE IN LENGTH, AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS, AND A WORK ZONE CONDITION IN PLACE THAT REDUCES THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS (I.E., LANE CLOSURE, LANE SHIFT, CROSSOVER, CONTRAFLOW AND/OR SHOULDER CLOSURE). THE LENGTH OF THE WORK ZONE CONDITION IS MEASURED FROM THE BEGINNING OF THE TAPER FOR THE SUBJECT WORK ZONE CONDITION IMPACTING THE TRAVEL LANES AND/OR SHOULDER TO THE END OF THE DOWNSTREAM TAPER, WHERE DRIVERS ARE RETURNED TO TYPICAL ALIGNMENT. AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS IS REQUIRED TO BALANCE THE ADDITIONAL EXPOSURE CREATED BY INSTALLING AND REMOVING WZSZ SIGNING WITH THE TIME NEEDED TO COMPLETE THE WORK.

IF THE WORK ZONE MEETS THESE MINIMUM CRITERIA, IT SHALL BE ANALYZED FURTHER USING TABLE 1 BELOW TO DETERMINE IF AND WHEN IT QUALIFIES FOR A SPEED LIMIT REDUCTION. DEPENDING ON THE ORIGINAL POSTED SPEED LIMIT, THE TYPE OF TEMPORARY TRAFFIC CONTROL USED, AND WHETHER OR NOT WORKERS ARE PRESENT, A WARRANTED WZSZ WILL VARY IN THE APPROVED SPEED LIMIT TO BE POSTED OVER TIME.

C&MS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED LIMIT REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION. EACH DIRECTION SHALL BE ANALYZED INDEPENDENTLY FROM EACH OTHER.

ALL WZSZS FLUCTUATE BETWEEN TWO APPROVED REDUCED SPEED LIMITS OR BETWEEN AN APPROVED REDUCED SPEED LIMIT AND THE ORIGINAL POSTED SPEED LIMIT. ONLY ONE OF TWO SIGNING STRATEGIES SHALL BE USED TO IMPLEMENT A WZSZ.

WZSZS USING DSL SIGN ASSEMBLIES SHALL BE IN ACCORDANCE WITH THIS NOTE, SUPPLEMENTAL SPECIFICATIONS (SS) 808 AND 908, AND TRAFFIC SCD MT-104.10.

WZSZS USING TEMPORARY FLAT SHEET SPEED LIMIT SIGNS SHALL BE IN ACCORDANCE WITH THIS NOTE AND SCD MT-104.10. ADDITIONALLY PAYMENT MAY BE REMOVED, OR A DISINCENTIVE APPLIED, FOR WZSZS USING TEMPORARY FLATSHEET SPEED LIMIT SIGNS THE SAME AS DESCRIBED IN THE MOST RECENT PUBLICATION OF SS 808 IN REGARDS TO WZSZS USING DSL SIGN ASSEMBLIES (SEE SS 808.06 PARAGRAPHS 4 THROUGH 7, INCLUDING TABLE 1).

ONLY ONE WARRANTED SPEED LIMIT APPLIES AT ANY ONE TIME; SPEED LIMIT REDUCTIONS ARE NOT CUMULATIVE. WZSZS SHALL NOT BE USED FOR MOVING/MOBILE ACTIVITIES, AS DEFINED IN OMUTCD PART 6.

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRE-CONSTRUCTION, POSTED SPEED LIMIT. DO NOT USE A PRIOR OR CURRENT WORK ZONE SPEED LIMIT AS A LOOK UP VALUE IN THE TABLE. POSITIVE PROTECTION IS GENERALLY REGARDED AS PORTABLE BARRIER OR OTHER RIGID BARRIER IN USE ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WITHOUT POSITIVE PROTECTION IS GENERALLY REGARDED AS USING DRUMS, CONES, SHADOW VEHICLE, ETC., ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WORKERS ARE CONSIDERED AS BEING PRESENT WHEN ON-SITE, WORKING WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WHEN THE WORK ZONE CONDITION REDUCING THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS IS REMOVED, THE SPEED LIMIT DISPLAYED SHALL RETURN TO THE ORIGINAL POSTED SPEED LIMIT.

TABLE 1: WARRANTED WORK ZONE SPEED LIMITS (MPH) FOR WORK ZONES ON HIGH-SPEED (>=55 MPH) MULTI-LANE HIGHWAYS

ORIGINAL POSTED SPEED LIMIT	WITH POSITIVE PROTECTION		WITHOUT POSITIVE PROTECTION	
	WORKERS PRESENT	WORKERS NOT PRESENT	WORKERS PRESENT	WORKERS NOT PRESENT
70	60	65	55	65
65	55	60	50	60
60	55	60	50	60
55	50	55	45	55

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY - 36 SIGN MNTH

ASSUMING 18 DSL SIGN ASSEMBLIES FOR 2 MONTHS

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

MAINTENANCE OF TRAFFIC DESIGN SPEED LIMIT

THE EXISTING FUNCTIONALITY OF U.S.R. 30 WILL BE REDUCED AT THE BEGINNING OF THE LANE CLOSURE TAPER. THIS IS CONSIDERED THE BEGINNING OF THE WORK ZONE. THE LANE CLOSURE SHALL BE SET UP PER STANDARD CONSTRUCTION DRAWING MT-95.30. USE A SPEED LIMIT OF 70 MPH TO DETERMINE THE TAPER AND SPACING FOR THIS STANDARD DRAWING.

ONCE INSIDE THE CONSTRUCTION ZONE, THE MAINTENANCE OF TRAFFIC MUST BE DESIGNED FOR THE HIGHEST SPEED LIMIT THAT WILL BE PRESENT.

CALCULATED JLG CHECKED TAB

MAINTENANCE OF TRAFFIC GENERAL NOTES

VAN-30/224-4.05/11.44

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ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE (OFFICE OF MATERIALS MANAGEMENT WEB PAGE). THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER.

THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE. THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS/HER CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFT-WARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN - 8 SIGN MONTH

ASSUMING 2 PCMS SIGNS FOR 2 MONTHS FOR LANE CLOSURES
ASSUMING 2 PCMS SIGNS FOR 1 MONTHS FOR RAMP CLOSURES
ASSUMING 2 PCMS SIGNS FOR 1 MONTHS FOR REST AREA CLOSURES

ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

NOTICE OF CLOSURE SIGNS (W20-H13),SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW.

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE

ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
RAMP & ROAD	>=2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	>12 HOURS & <2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
CLOSURES	<12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRIC RATHER THAN THE GENERAL SWITCHBOARD NUMBER.



W20-13
ENTER DATE

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE OFFICE OF COMMUNICATIONS. THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL AND SHALL LLIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTICE TO OFFICE OF COMMUNICATIONS TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO OFFICE OF COMMUNICATIONS
RAMP & ROAD	>=2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	>12 HOURS & <2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
CLOSURES	<12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>=2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	<2 WEEKS	2 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES		14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTICE TO OFFICE OF COMMUNICATIONS TIME TABLE.

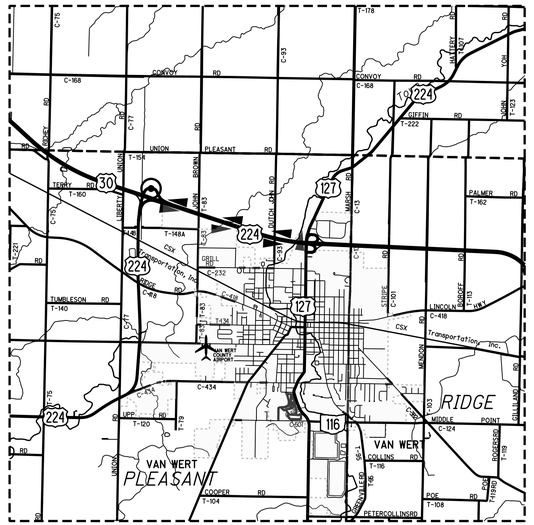
U.S.R. 224 RAMP CLOSURES

RAMPS "C" AND "D" FOR U.S.R. 224 ARE TO REMAIN OPEN DURING CONSTRUCTION. RAMPS "A" AND "B" FOR U.S.R. 224 ARE PERMITTED TO BE CLOSED FOR A SINGLE CONCURRENT DURATION NOT TO EXCEED TWENTY-ONE (21) CALENDAR DAYS IN ORDER TO COMPLETE JOINT REPAIRS, CONCRETE MEDIAN REPAIR AND SEALING AND PLANING, PAVING, AND STRIPING OPERATIONS. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF $2200 PER DAY FOR EACH CALENDAR DAY A RAMP REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. THE RAMP "A" AND "B" CLOSURES SHALL BE ESTABLISHED, MAINTAINED AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR AS PER STANDARD CONSTRUCTION DRAWINGS MT-98.29 AND MT-98.30. THE DETOURS SHALL BE ESTABLISHED, MAINTAINED AND SUBSEQUENTLY REMOVED BY THE STATE OF OHIO. THE CONTRACTOR SHALL NOTIFY ODOT 14 DAYS PRIOR TO CLOSURE/DETOUR.

THE FIRST DAY THAT THE DETOUR IS IN EFFECT SHALL BE CONSIDERED THE STARTING DATE OF THE 21 DAY DETOUR/CLOSURE LIMITATION. ON OR BEFORE THE 21ST DAY, THE RAMPS SHALL BE OPENED TO THE SAFE AND CONVENIENT USE OF THE TRAVELING PUBLIC. IF THE ROADWAY IS NOT OPENED ON THE 21ST DAY, DISINCENTIVES SHALL BE ASSESSED AS PER THE ABOVE SPECIFICATIONS.

PORTABLE CHANGEABLE MESSAGE SIGNS, AS DETAILED ON THIS SHEET, SHALL BE PROVIDED BY THE CONTRACTOR AT LEAST 7 CALENDAR DAYS IN ADVANCE OF THE SCHEDULED RAMP "A" AND "B" CLOSURE AT U.S.R. 224. THE PCMS'S WILL PROVIDE MOTORISTS ADVANCED NOTICE OF THE RAMP CLOSURES. THE PCMS'S SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD IN ADVANCE OF THE CLOSURE. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. THE CONTRACTOR SHALL COVER EXISTING EXIT GUIDE SIGNS WITH A CLOSED OVERLAY SIGN AND PROVIDE THE APPROPRIATE TRAFFIC CONTROL TO CLOSE THE U.S.R. 224 RAMPS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

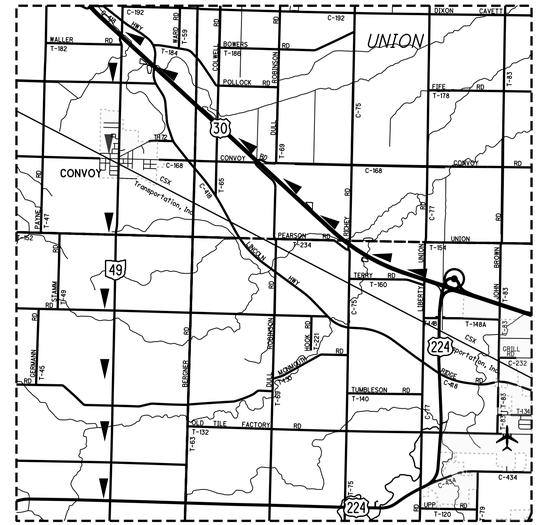


OFFICIAL DETOUR MAP
RAMP "A": U.S.R. 30 WB ENTRANCE RAMP

SCALE IN MILES
0 1 2 3 4

LEGEND
- PROJECT LOCATION
- OFFICIAL SIGNED DETOUR

DETOUR
-EAST ON U.S.R. 30 TO U.S.R. 127
-RAMP TO U.S.R. 30 WEST



OFFICIAL DETOUR MAP
RAMP "B": U.S.R. 224 SB EXIT RAMP

SCALE IN MILES
0 1 2 3 4

LEGEND
- PROJECT LOCATION
- OFFICIAL SIGNED DETOUR

DETOUR
-WEST ON U.S.R. 30 TO SR 49
-SOUTH ON SR 49 TO U.S.R. 224

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MAINTENANCE OF TRAFFIC GENERAL NOTES

VAN-30/224-4.05/11.44

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SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
7	7A	8	9	10		13	14	15	16		01/NHS/PV	02/S(2)/PV	03/NFP/OT						
																		ROADWAY	
LS											LS			201	11000	LS		CLEARING AND GRUBBING	
							147						147	202	23001	147	SY	PAVEMENT REMOVED, AS PER PLAN	7
300											300			202	23010	300	SY	PAVEMENT REMOVED, ASPHALT	
							149						149	202	30000	149	SF	WALK REMOVED	
1,576											574	1,002		512	10000	1,576	SY	SEALING OF CONCRETE SURFACES	
113											68	45		519	11101	113	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	7
							95						95	608	10000	95	SF	4" CONCRETE WALK	
							81						81	608	52000	81	SF	CURB RAMP	
																		EROSION CONTROL	
							7						7	659	10001	7	SY	SEEDING AND MULCHING, AS PER PLAN	7
1,000											1,000			832	30000	1,000	EACH	EROSION CONTROL	
																		PAVEMENT	
100											100			253	02000	100	CY	PAVEMENT REPAIR	
						405,155					366,757	17,938	20,460	254	01000	405,155	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.5" THICK	
						741							741	254	01000	741	SY	PAVEMENT PLANING, ASPHALT CONCRETE, VARIABLE	
						6,317					5,040	425	852	254	01600	6,317	SY	PATCHING PLANED SURFACE	
									815		580		235	255	10011	815	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC1, AS PER PLAN	16
									2,810		1,842		968	255	20000	2,810	FT	FULL DEPTH PAVEMENT SAWING	
						37,811					31,174	1,525	5,112	407	20000	37,811	GAL	NON-TRACKING TACK COAT	
						8,349					8,349			442	00100	8,349	CY	ANTI-SEGREGATION EQUIPMENT	
						16,881					15,282	747	852	442	10001	16,881	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN, (PG 70-22M)	7
						207							207	442	20000	207	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448)	
							147						147	451	15010	147	SY	10" REINFORCED CONCRETE PAVEMENT, CLASS QC1	
25						2,192					2,007		210	617	10100	2,217	CY	COMPACTED AGGREGATE	
						28.58					28.58			618	40600	28.58	MILE	RUMBLE STRIPS, (ASPHALT CONCRETE)	
	66,540										66,540			SPECIAL	69098100	66,540	FT	VOID REDUCING ASPHALT MEMBRANE (VRAM)	7A
																		TRAFFIC CONTROL	
							1,139				1,025	16	98	621	00100	1,139	EACH	RPM	
							1,159				1,025	36	98	621	54000	1,159	EACH	RAISED PAVEMENT MARKER REMOVED	
6													6	625	00480	6	EACH	CONNECTION, UNFUSED PERMANENT	
3													3	632	26500	3	EACH	DETECTOR LOOP	
								32.18			30.58	0.57	1.03	642	00094	32.18	MILE	EDGE LINE, 6"	
								14.35			14.35			642	00194	14.35	MILE	LANE LINE, 6"	
								0.93				0.93		642	00290	0.93	MILE	CENTER LINE	
								15,546			11,706	600	3,240	644	00404	15,546	FT	CHANNELIZING LINE, 12"	
								240			240			644	00500	240	FT	STOP LINE	
								2,750			2,500	250		644	00700	2,750	FT	TRANSVERSE/DIAGONAL LINE	
								48			48			644	01300	48	EACH	LANE ARROW	
								8,126			2,756	1,390	3,980	644	01510	8,126	FT	DOTTED LINE, 6"	
																		MAINTENANCE OF TRAFFIC	
			64								64			614	11110	64	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
		34									34			614	12460	34	EACH	WORK ZONE MARKING SIGN	
			34								34			614	12484	34	EACH	WORK ZONE INCREASED PENALTIES SIGN	
		5									5			614	12500	5	EACH	REPLACEMENT SIGN	
		50									50			614	12600	50	EACH	REPLACEMENT DRUM	
				8							8			614	18601	8	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	10
			36								36			614	18700	36	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
		14.4									14.4			614	20000	14.4	MILE	WORK ZONE LANE LINE, CLASS I	
		0.65									0.65			614	22200	0.65	MILE	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I	
		3,430									3,430			614	24400	3,430	FT	WORK ZONE DOTTED LINE, CLASS I, 740.06, TYPE I	
																		INCIDENTALS	
		LS									LS			614	11001	LS		MAINTAINING TRAFFIC, AS PER PLAN	8
											4			619	16010	4	MNTH	FIELD OFFICE, TYPE B	
											LS			623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
											LS			624	10000	LS		MOBILIZATION	

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GENERAL SUMMARY

VAN-30/224-4.05/11.44

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STATION		DESCRIPTION	LENGTH	WIDTH	CADD AREA	254			407	442		617	618	442
						PAVEMENT PLANING, ASPHALT CONCRETE (1.5" THICK)	PAVMENT PLANING, ASPHALT CONCRETE (VARIABLE DEPTH)	PATCHING PLANED SURFACE	NON-TRACKING TACK COAT	1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448)	ANTI SEGRAGATION EQUIPMENT (Surface Course)	COMPACTED AGGREGATE (2" AVERAGE THICKNESS)	RUMBLE STRIPS, (ASPHALT CONCRETE)	1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446), AS PER PLAN, (PG 70-22M)
FROM	TO		FT	FT	SF	SY	SY	SY	GAL	CY	CY	CY	MI	CY
PARTICIPATION CODE 01/NHS/PV														
WESTBOUND US 30														
214+50.00	225+38.15	MAIN LINE	1088.15	38.5		4654.9			395.7		120.9	26.9	0.41	194.0
STATION EQUATION														
231+97.54	313+72.12	MAIN LINE	8174.58	38.5		34969.0			2972.4		908.3	201.8	3.10	1457.0
313+72.12	313+97.12	APPROACH SLAB	25.00	14.5		40.3			3.4			0.6	0.01	1.7
313+97.12	314+22.00	BRIDGE	24.88	38		STRUCTURE NO. VAN-30-0581 LT.								
314+22.00	314+47.00	APPROACH SLAB	25.00	14.5		40.3			3.4			0.6	0.01	1.7
314+47.00	491+77.56	MAIN LINE	17730.56	38.5		75847.4			6447.0		1970.1	437.8	6.72	3160.3
491+77.56	492+02.56	APPROACH SLAB	25.00	14.5		40.3			3.4			0.6	0.01	1.7
492+02.56	492+69.30	BRIDGE	66.74	38		STRUCTURE NO. VAN-30-0920 LT.								
492+69.30	492+94.30	APPROACH SLAB	25.00	14		38.9			3.3			0.6	0.01	1.6
492+94.30	510+82.73	MAIN LINE	1788.43	38.5		7650.5			650.3		198.7	44.2	0.68	318.8
510+82.73	511+07.73	APPROACH SLAB	25.00	14.5		40.3			3.4			0.6	0.01	1.7
511+07.73	511+87.25	BRIDGE	79.52	38		STRUCTURE NO. VAN-30-0956 LT.								
511+87.25	512+12.25	APPROACH SLAB	25.00	14.5		40.3			3.4			0.6	0.01	1.7
512+12.25	600+00.00	MAIN LINE	8787.75	38.5		37592.0			3195.3		976.4	217.0	3.33	1566.3
EASTBOUND US 30														
214+50.00	225+38.15	MAIN LINE	1088.15	38.5		4654.9			395.7		120.9	26.9	0.41	194.0
STATION EQUATION														
231+97.54	313+20.57	MAIN LINE	8123.03	38.5		34748.5			2953.6		902.6	200.6	3.08	1447.9
313+20.57	313+45.57	APPROACH SLAB	25.00	14.5		40.3			3.4			0.6	0.01	1.7
313+45.57	313+70.45	BRIDGE	24.88	38		STRUCTURE NO. VAN-30-0580 RT.								
313+70.45	313+95.45	APPROACH SLAB	25.00	14.5		40.3			3.4			0.6	0.01	1.7
313+95.45	491+25.86	MAIN LINE	17730.41	38.5		75846.8			6447.0		1970.0	437.8	6.72	3160.3
491+25.86	491+50.86	APPROACH SLAB	25.00	14.5		40.3			3.4			0.6	0.01	1.7
491+50.86	492+17.60	BRIDGE	66.74	38		STRUCTURE NO. VAN-30-0919 RT.								
492+17.60	492+42.60	APPROACH SLAB	25.00	14.5		40.3			3.4			0.6	0.01	1.7
492+42.60	510+67.35	MAIN LINE	1824.75	38.5		7805.9			663.5		202.8	45.1	0.69	325.2
510+67.35	510+92.35	APPROACH SLAB	25.00	14.5		40.3			3.4			0.6	0.01	1.7
510+92.35	511+71.87	BRIDGE	79.52	38		STRUCTURE NO. VAN-30-0956 RT.								
511+71.87	511+96.87	APPROACH SLAB	25.00	14.5		40.3			3.4			0.6	0.01	1.7
511+96.87	600+00.00	MAIN LINE	8803.13	38.5		37657.8			3200.9		978.1	217.4	3.33	1569.1
AT-GRADE INTERSECTIONS														
DIXON CAVETTE ROAD/LINCOLN HIGHWAY - STA. 253+71.17					29280	3253.3		650.7	276.5					135.6
S.R. 49/CONVOY HELLER ROAD - STA. 282+76.00					29280	3253.3		650.7	276.5					135.6
COLWELL ROAD - STA. 373+10.00					29280	3253.3		650.7	276.5					135.6
CONVOY ROAD - STA. 411+40.10					29280	3253.3		650.7	276.5					135.6
RICHEY ROAD - STA. 498+10.01					29280	3253.3		650.7	276.5					135.6
LIBERTY UNION ROAD - STA. 556+32.00					29280	3253.3		650.7	276.5					135.6
MEDIAN CROSSOVER - STA. 224+22.50					1627	180.8			15.4					7.5
SUBTOTAL A						341610.4	0.0	3904.0	29036.9	0.0	8348.8	1862.7	28.58	14233.8

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PAVEMENT SUBSUMMARY

VAN-30/224-4.05/11.44

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STATION		DESCRIPTION	LENGTH	WIDTH	SQ FEET	254			407	442		617	618	442
						PAVEMENT PLANING, ASPHALT CONCRETE (1.5" THICK)	PAVMENT PLANING, ASPHALT CONCRETE (VARIABLE DEPTH)	PATCHING PLANED SURFACE	NON-TRACKING TACK COAT	1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448)	ANTI SEGRAGATION EQUIPMENT (Surface Course)	COMPACTED AGGREGATE (2" AVERAGE THICKNESS)	RUMBLE STRIPS, (ASPHALT CONCRETE)	1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446), AS PER PLAN, (PG 70-22M)
FROM	TO		FT	FT		SY	SY	SY	GAL	CY	CY	CY	MI	CY
U.S.R. 224														
561+36.32	577+24.00	RAMP "A" SPEED CHANGE	1587.68	VARIES	23021	2557.9			217.4					106.6
654+51.96 U.S.R. 224	660+28.31 U.S.R. 224	RAMP "A"	576.35	25		1601.0			136.1			14.2		66.7
641+98.26 U.S.R. 224	654+51.96 U.S.R. 224	TWO WAY RAMP "A"/"B"	1253.70	42		5850.6			497.3			31.0		243.8
654+51.96 U.S.R. 224	663+38.89 U.S.R. 224	RAMP "B"	886.93	25		2463.7			209.4			21.9		102.7
586+86.00	594+75.00	RAMP "B" SPEED CHANGE	789.00	VARIES	11794	1310.4			111.4					54.6
557+26.00	563+73.82	RAMP "C" BEG. SP. CHANGE	647.82	VARIES	10317	1146.3		114.6	97.4					47.8
563+73.82	573+52.00	RAMP "C"	978.18	30		3260.6		326.1	277.2			24.2		135.9
567+84.74	579+18.18	RAMP "D"	1133.44	25		3148.4		314.8	267.6			28.0		131.2
579+18.18	594+62.80	RAMP "D" END SP. CHANGE	1544.62	VARIES	34266	3807.4		380.7	323.6					158.6
SUBTOTAL B						25146.3	0.0	1136.3	2137.4	0.0	0.0	119.2	0.0	1047.9
SUBTOTAL A						341610.4	0	3904.0	29036.9	0.0	8348.8	1862.7	28.58	14233.8
TOTALS FOR PARTICIPATION CODE 01/NHS/PV						366757	0	5040	31174	0	8349	1982	28.58	15282
PARTICIPATION CODE 02/S<2/PV														
U.S.R. 224														
610+30.99	619+00.00	U.S.R. 224	869.01	44	37367	4248.5		424.8	361.1					177.0
619+00.00	639+32.30	TWO WAY RAMP "A"/"B"	2032.3	44	84299	9935.7			844.5					414.0
621+00.00	633+97.82	RAMP "C" END SP. CHANGE	1297.82	VARIES	9252	1028.0			87.4					42.8
629+14.62	632+35.76	RAMP "D" BEG. SP. CHANGE	321.14	VARIES	24535	2726.1			231.7					113.6
TOTALS PARTICIPATION CODE 02/S<2/PV						17938	0	425	1525	0	0	0	0	747
PARTICIPATION CODE 03/NFP/OT														
WEIGH STATION														
330+26.04	338+09.88	RAMP "A" SPEED CHANGE	783.84	VARIES	11592	1288.0			985.3			9.7		53.7
338+09.88	345+11.00	RAMP "A"	701.12	22		1713.8			145.7			17.3		71.4
346+29.00	355+50.00	RAMP "B"	921	22		2251.3			191.4			22.7		93.8
355+50.00	372+00.00	RAMP "B" SPEED CHANGE	1650.00	VARIES	27460	3051.1			2334.1			20.4		127.1
PARKING LOT			352	108					359.0	176.0		20.0		
PARKING LOT DRIVES					6672		741.3		63.0	30.9				
REST AREAS														
429+01.67	444+85.00	RAMP "A" SPEED CHANGE	1583.33	VARIES	25075	2786.1			236.8			30.0		116.1
444+85.00	447+57.64	RAMP "A"	272.64	30		908.8		181.8	77.2					37.9
452+66.04	456+26.94	RAMP "B"	360.90	30		1203.0		240.6	102.3			30.0		50.1
456+26.94	464+12.73	RAMP "B" SPEED CHANGE	785.79	VARIES	10583	1175.8			99.9					49.0
438+01.11	445+87.10	RAMP "C" SPEED CHANGE	785.99	VARIES	10703	1189.2			101.1			30.0		49.6
445+87.10	449+47.97	RAMP "C"	360.87	30		1202.9		240.6	102.2					50.1
454+56.20	457+40.00	RAMP "D"	283.80	30		946.0		189.2	80.4			30.0		39.4
457+40.00	473+08.15	RAMP "D" SPEED CHANGE	1568.15	VARIES	24697	2744.1			233.2					114.3
TOTALS PARTICIPATION CODE 03/NFP/OT						20460	741	852	5112	207	0	210	0	852

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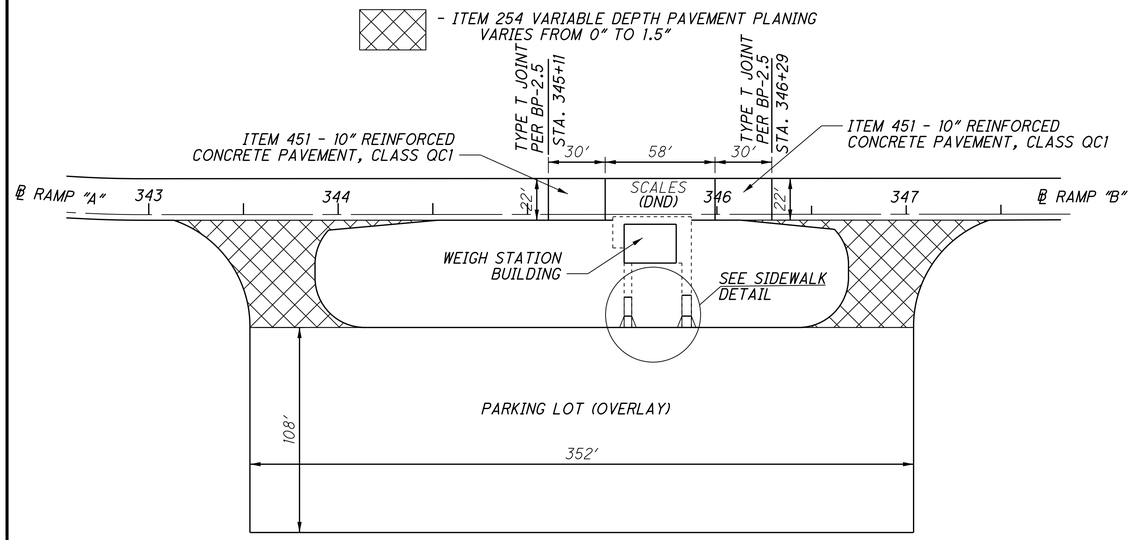
PAVEMENT SUBSUMMARY

VAN-30/224-4.05/11.44

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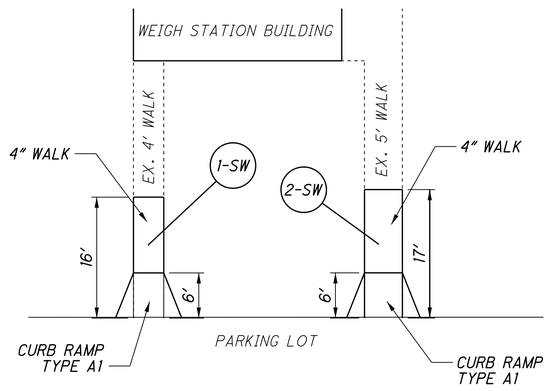
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WEIGH STATION DETAIL



CONCRETE PAVEMENT PARTICPATION CODE - 03/NFP/OT			
		202	451
LENGTH	WIDTH	PAVEMENT REMOVED, AS PER PLAN	10" REINFORCED CONCRETE PAVEMENT, CLASS QC1
FT	FT	SY	SY
30	22	73.3	73.3
30	22	73.3	73.3
TOTAL TO GEN. SUMMARY		147	147

SIDEWALK PARTICPATION CODE - 03/NFP/OT						
			202	608		659
REFERENCE	LENGTH	WIDTH	WALK REMOVED	4" CONCRETE WALK	CURB RAMP. TYPE A1	SEEDING AND MULCHING, AS PER PLAN
	FT	FT	SF	SF	SF	SY
1-SW	16	4	64	40	37.5	3.6
2-SW	17	5	85	55	43.5	3.8
TOTALS CARRIED TO GEN. SUM			149	95	81	7



SIDEWALK DETAIL

STATION		LENGTH	621			
			RAISED PAVEMENT MARKER REMOVED	RPM's		
FROM	TO	FT	EACH			
PARTICIPATION CODE 01/NHS/PV				White/Red	Yellow/Yellow	Yellow/Red
EASTBOUND						
214+50	600+00	38550.00	484	484		
WESTBOUND						
214+50	600+00	38550.00	484	484		
US 224	A		14	10		4
	B		15	9		6
	C		14	9		5
	D		14	9		5
TOTALS PARTICIPATION CODE 01/NHS/PV			1025	1005		20
PARTICIPATION CODE 02/S<2/PV						
U.S.R. 224						
610+30.99	619+00.00	869.0	16		16	
TWO WAY RAMP A/B						
619+00.00	639+32.30	2032.3				
RAMP C END SP CHANGE						
621+00.00	633+97.82	1297.8		10		
RAMP D BEG SP CHANGE						
629+14.62	632+35.76	321.1		10		
TOTALS PARTICIPATION CODE 02/S<2/PV			16	20	16	0
PARTICIPATION CODE 03/NFP/OT						
Weight Station	A		20	13		7
Ramps	B		21	10		11
Rest Area	A		14	10		4
Ramps	B		15	9		6
	C		14	9		5
	D		14	9		5
TOTALS PARTICIPATION CODE 03/NFP/OT			98	60		38
TOTALS TO GENERAL SUMMARY			1139	1159		

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PAVEMENT SUBSUMMARY/PARKING LOT DETAIL

VAN-30/224-4.05/11.44

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STATION		DESCRIPTION	LENGTH	WIDTH	642		644						
					EDGE LINE, 6"		LANE LINE, 6"	CHANNELIZING LINE, 12"	STOP LINE	TRANSVERSE/ DIAGONAL LINE	CHEVRON MARKING	LANE ARROW	DOTTED LINE, 6"
FROM	TO		FT	FT	MILE		MILE	FT	FT	FT	FT	FT	FT
					White	Yellow	White						
WESTBOUND US 30													
PARTICIPATION CODE 01/NHS/PV													
214+50.00	225+38.15	MAIN LINE	1088.15	38	0.206	0.206	0.206						
STATION EQUATION													
231+97.54	313+72.12	MAIN LINE	8174.58	38	1.548	1.548	1.548						
313+72.12	313+97.12	APPROACH SLAB	25.00	14	0.005	0.005	0.005						
313+97.12	314+22.00	BRIDGE	24.88	38	0.005	0.005	0.005						
314+22.00	314+47.00	APPROACH SLAB	25.00	14	0.005	0.005	0.005						
314+47.00	491+77.56	MAIN LINE	17730.56	38	3.358	3.358	3.358						
491+77.56	492+02.56	APPROACH SLAB	25.00	14	0.005	0.005	0.005						
492+02.56	492+69.30	BRIDGE	66.74	38	0.013	0.013	0.013						
492+69.30	492+94.30	APPROACH SLAB	25.00	14	0.005	0.005	0.005						
492+94.30	510+82.73	MAIN LINE	1788.43	38	0.339	0.339	0.339						
510+82.73	511+07.73	APPROACH SLAB	25.00	14	0.005	0.005	0.005						
511+07.73	511+87.25	BRIDGE	79.52	38	0.015	0.015	0.015						
511+87.25	512+12.25	APPROACH SLAB	25.00	14	0.005	0.005	0.005						
512+12.25	600+00.00	MAIN LINE	8787.75	38	1.664	1.664	1.664						
EASTBOUND US 30													
214+50.00	225+38.15	MAIN LINE	1088.15	38	0.206	0.206	0.206						
STATION EQUATION													
231+97.54	313+20.57	MAIN LINE	8123.03	38	1.538	1.538	1.538						
313+20.57	313+45.57	APPROACH SLAB	25.00	14	0.005	0.005	0.005						
313+45.57	313+70.45	BRIDGE	24.88	38	0.005	0.005	0.005						
313+70.45	313+95.45	APPROACH SLAB	25.00	14	0.005	0.005	0.005						
313+95.45	491+25.86	MAIN LINE	17730.41	38	3.358	3.358	3.358						
491+25.86	491+50.86	APPROACH SLAB	25.00	14	0.005	0.005	0.005						
491+50.86	492+17.60	BRIDGE	66.74	38	0.013	0.013	0.013						
492+17.60	492+42.60	APPROACH SLAB	25.00	14	0.005	0.005	0.005						
492+42.60	510+67.35	MAIN LINE	1824.75	38	0.346	0.346	0.346						
510+67.35	510+92.35	APPROACH SLAB	25.00	14	0.005	0.005	0.005						
510+92.35	511+71.87	BRIDGE	79.52	38	0.015	0.015	0.015						
511+71.87	511+96.87	APPROACH SLAB	25.00	14	0.005	0.005	0.005						
511+96.87	600+00.00	MAIN LINE	8803.13	38	1.667	1.667	1.667						
AT-GRADE INTERSECTIONS													
DIXON CAVETTE ROAD/LINCOLN HIGHWAY - STA. 253+71.17								1414	40	220		8	
S.R. 49/CONVOY HELLER ROAD - STA. 282+76.00								1414	40	220		8	
COLWELL ROAD - STA. 373+10.00								1516	40	242		8	
CONVOY ROAD - STA. 411+40.10								1696	40	264		8	
RICHEY ROAD - STA. 498+10.01								1448	40	252		8	
LIBERTY UNION ROAD - STA. 556+32.00								1448	40	252		8	
MEDIAN CROSSOVER - STA. 224+22.50													
SUBTOTAL A					14.353	14.353	14.353	8936	240	1450	0	48	0

STATION		DESCRIPTION	LENGTH	WIDTH	642				644				
					EDGE LINE, 6"		LANE LINE, 6"	CENTER LINE	CHANNELIZING LINE, 12"	STOP LINE	TRANSVERSE/DIAGONAL LINE	LANE ARROW	DOTTED LINE, 6"
FROM	TO		FT	FT	MILE		MILE	MILE	FT	FT	FT	FT	FT
					White	Yellow	White	Single Dbl					
U.S.R. 224													
641+98.26	561+36.32	RAMP "A"	3241	VARIES	0.099	0.170			800				950
594+75.00	641+98.26	RAMP "B"	2985	VARIES	0.233	0.565			570				506
557+26.00	573+52.00	RAMP "C"	1626	VARIES	0.183	0.183			600				350
567+84.74	594+62.80	RAMP "D"	2678	VARIES	0.219	0.219			800				950
SUBTOTAL B					0.734	1.138			2770				2756
SUBTOTAL A & B					15.087	15.490							
TOTALS FOR PARTICIPATION CODE 01/NHS/PV					30.58		14.35		11706	240	2500	48	2756

PARTICIPATION CODE 02/S<2/PV

U.S.R. 224													
610+30.99	619+00.00	U.S.R. 224	869.0	43	0.198			0.165	300				
619+00.00	639+32.30	TWO WAY RAMP A/B	2032.3	43	0.198	0.170	0.770						
621+00.00	633+97.82	RAMP C END SP CHANGE	1297.8	VAR					300				840
629+14.62	632+35.76	RAMP D BEG SP CHANGE	321.1	VAR							250		550
SUBTOTAL					0.397	0.170	0.77	0.16	600		250		1390
TOTALS FOR PARTICIPATION CODE 02/S<2/PV					0.57		0.93		600		250		1390

PARTICIPATION CODE 03/NFP/OT

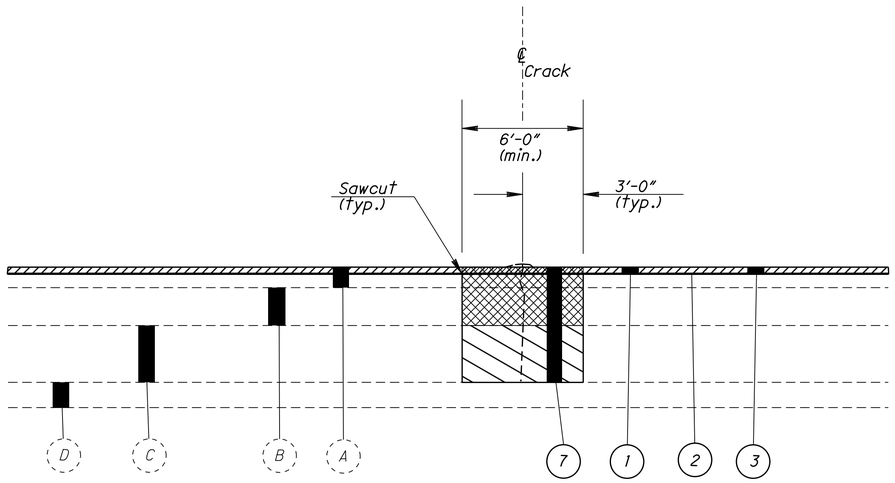
WEIGH STATION													
PARTICIPATION CODE 03/NFP/OT													
330+26.04	345+11	RAMP "A"			0.092	0.092			528				520
346+29	372+00.00	RAMP "B"			0.148	0.148			732				1280
PARKING LOT			350	108									
PARKING LOT DRIVES													
REST AREAS													
429+01.67	447+57.64	RAMP "A"	1855.97	VAR	0.117	0.054			672				1242
452+66.04	464+12.73	RAMP "B"	1146.69	VAR	0.068	0.068			318				470
438+01.11	449+47.97	RAMP "C"	1146.86	VAR	0.069	0.069			318				468
454+56.20	473+08.15	RAMP "D"	1851.95	VAR	0.052	0.052			672				
SUBTOTAL					0.55	0.48							
TOTAL PARTICIPATION CODE 03/NFP/OT					1.03				3240				3980

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TRAFFIC CONTROL SUBSUMMARY

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ITEM 255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC1, AS PER PLAN

EXISTING LEGEND

- (A) 3.25"± ASPHALT CONCRETE
- (B) 6"± BITUMINOUS AGGREGATE BASE
- (C) 9"± REINFORCED PORTLAND CONCRETE PAVEMENT
- (D) VARIABLE SUBBASE

CLASS QC1 CONCRETE

ASPHALT CONCRETE BASE, PG64-22

PAVEMENT PLANING

PROPOSED LEGEND

(1) ITEM 442 1-½" ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE A (446), AS PER PLAN, (PG 70-22M)

(2) ITEM 407 NON-TRACKING TACK COAT

(3) ITEM 254 1 1/2" PAVEMENT PLANING, ASPHALT CONCRETE

(7) ITEM 255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC1, AS PER PLAN

ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC1, AS PER PLAN

ITEM 255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC1, AS PER PLAN SHALL FOLLOW THE SPECIFICATION FOR THE 255 ITEM EXCEPT FOR CMS 255.01 DESCRIPTION. PLACE, CONSOLIDATE, FINISH AND CURE NEW CONCRETE CLASS QC1 TO THE LEVEL OF THE EXISTING CONCRETE PAVEMENT. FILL THE ADDITIONAL VOID WITH ITEM 301 ASPHALT CONCRETE BASE PG64-22.

PAVEMENT REPAIRS ARE TO BE MADE PRIOR TO PLANING AT THE LOCATIONS DESIGNATED BY THE ENGINEER. PERFORM AN ITEM 255 FULL DEPTH SAW CUT AND COMPLETE THE REPAIR AS PER ITEM 255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC1, AS PER PLAN, AS DETAILED IN THESE PLANS.

ITEM 255 FULL DEPTH PAVEMENT REMOVAL DIMENSIONS AND QUANTITIES

	LENGTH	WIDTH	AREA	QUANTITY	TOTAL AREA
MAINLINE U.S.R. 30	6'	12'	8 SY	32	256 SY
U.S.R. 224 RAMPS	6'	17'	11.3 SY	5	57 SY
01/NHS/PV	200'	12'	267 SY	1	267 SY
					580 SY
WEIGHT STATION AND REST AREA RAMPS 03/NFP/OT	6'	16'	10.7 SY	22	235 SY
					235 SY

ITEM 255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC1, AS PER PLAN = 815 SY

ITEM 255 PAVEMENT SAWING DIMENSIONS AND QUANTITIES

	LENGTH	WIDTH	PERIMETER	QUANTITY	TOTAL AREA
MAINLINE U.S.R. 30	6'	12'	36 FT	32	1152 FT
U.S.R. 224 RAMPS	6'	17'	46 FT	5	230 FT
01/NHS/PV	200'	12'	460 FT	1	460 FT
					1842 FT
WEIGHT STATION AND REST AREA RAMPS 03/NFP/OT	6'	16'	44 FT	22	968 FT
					968 FT

ITEM 255 FULL DEPTH PAVEMENT SAWING = 2810 FT

QUANTITIES CARRIED TO GENERAL SUMMARY

CALCULATED JLG CHECKED TAB

PAVEMENT REPAIR DETAILS

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