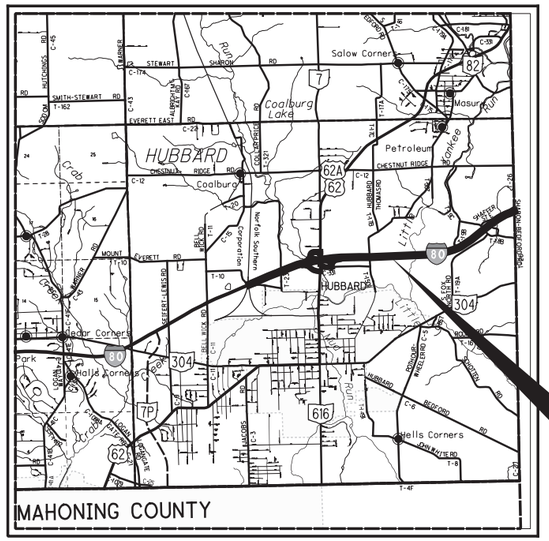
TRU - IR 80-08.56 (PART 1 AND PART 2)
210033 PID - 96519
Dist 4 1/14/2021

Contract Proposal available @
www.contracts.dot.state.oh.us

I:\ProjectData\TRU\96519_80_8.56\Design\Roadway\Sheets\96519_GT001.dgn Sheet 10/1/2020 10:48:33 AM mpalagan



I-80
BEGIN PROJECT: SLM 8.56
END PROJECT: SLM 12.33

LOCATION MAP

LATITUDE: 41°10'36" LONGITUDE: 80°33'10"

SCALE IN MILES
0 1 2 3 4

N

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

DESIGN DESIGNATION

DESIGN FUNCTIONAL CLASSIFICATION:
URBAN INTERSTATE (SLM 8.56 - 10.79)
RURAL INTERSTATE (SLM 10.79 - 12.33)
NHS PROJECT ..... YES

DESIGN EXCEPTIONS

NONE

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non-members must be called directly)

PLAN PREPARED BY:
ODOT DISTRICT 4 - CAPITAL PLANNING
2088 S. ARLINGTON RD
AKRON, OH 44306

ENGINEERS SEAL:

STATE OF OHIO
PETER DINH
E-84438
REGISTERED PROFESSIONAL ENGINEER

SIGNED: Peter Dinh
DATE: 10/7/2020

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

TRU-80-08.56 PART 1

HUBBARD AND LIBERTY TOWNSHIPS

TRUMBULL COUNTY

FOR PART 2, SEE TRU-80-10.99

INDEX OF SHEETS:

PROJECT DESCRIPTION

RESURFACING OF I-80 FROM SLM 8.56 - 12.33 IN TRUMBULL COUNTY. INCLUDES MINOR REHAB TO SEVERAL STRUCTURES AND REMOVAL OF 1 ABANDONED STRUCTURE.

EARTH DISTURBED AREAS

PROJECT EDA:	N/A (MAINTENANCE PROJECT)
ESTIMATED CONTRACTOR EDA:	N/A (MAINTENANCE PROJECT)
NOTICE OF INTENT EDA:	N/A (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

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 IMPROVEMENT.

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 ON SHEETS 8-11, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

CONFORMED SET

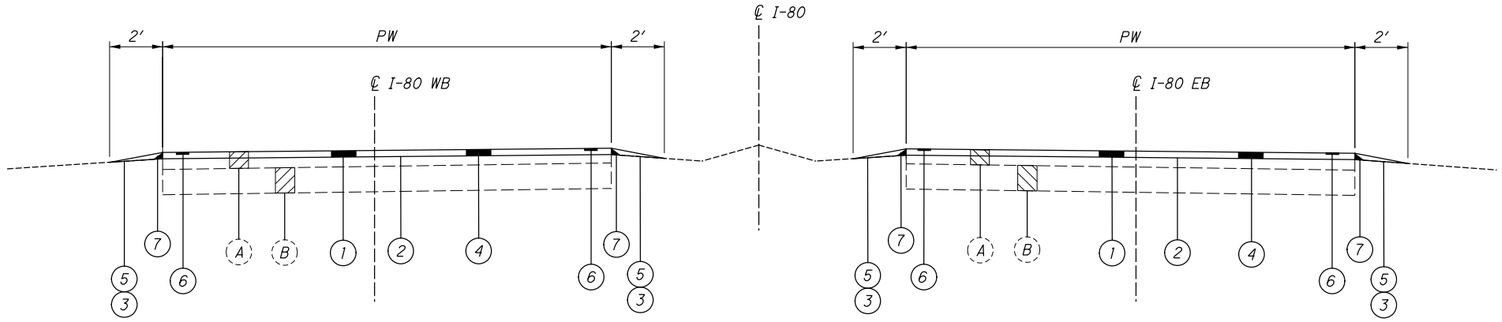
APPROVED AJ Noirot Jr.
DATE 10/6/2020 DISTRICT DEPUTY DIRECTOR

APPROVED
DATE DIRECTOR, DEPARTMENT OF TRANSPORTATION

Digitally signed by Tom Pannett
Date: 2020.12.04 11:00:02-05'00'

STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS
BP-3.1	1/17/20	MT-95.30	7/19/19	MT-102.10	10/16/15			800-2019	10/16/20	
BP-3.2	1/18/19	MT-95.32	4/19/19	MT-104.10	10/16/15			808	1/18/19	
BP-6.1	7/19/13	MT-95.45	1/17/20	MT-105.10	1/17/20			809	7/17/20	
		MT-95.50	7/21/17					821	4/20/12	
CB-3.3	1/15/16	MT-98.10	1/17/20	TC-42.20	10/18/13			832	10/19/18	
		MT-98.11	1/17/20	TC-52.10	10/18/13			846	4/17/15	
DM-4.3	1/15/16	MT-98.20	4/19/19	TC-52.10	10/18/13			856	10/20/17	
DM-4.4	1/15/16	MT-98.22	1/17/20	TC-52.20	7/20/18			908	10/20/17	
		MT-98.28	1/17/20	TC-65.10	1/17/14			921	4/20/12	
BP-9.1	1/18/19	MT-98.29	1/17/20	TC-65.11	7/21/17					
		MT-99.20	4/19/20	TC-71.10	1/19/18					
F-2.1	7/20/18	MT-99.60	7/15/16	TC-72.20	7/20/18					
F-3.3	7/19/13	MT-101.60	1/17/20	TC-73.20	1/17/20					
F-3.4	7/19/13	MT-101.70	7/17/20							
		MT-101.75	7/17/20							
		MT-101.90	7/17/20							

FEDERAL PROJECT NO. E190(995)
PID NO. 96519
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NORFOLK SOUTHERN
TRU-80-08.56
1 29



TYPICAL SECTION 1

TYPICAL SECTION 1				
ROUTE	SLM		LENGTH (MILES)	PW (FEET)
	FROM	TO		
I-80 WB	8.60	8.62	0.02	52 (AVG.)
I-80 WB	8.62	9.08	0.46	40
I-80 WB	9.08	9.37	0.29	30
I-80 WB	9.37	9.39	0.02	40
I-80 WB	9.41	9.45	0.04	45 (AVG.)
I-80 WB	9.45	9.53	0.08	58
I-80 WB	9.53	9.55	0.02	49
I-80 WB	9.60	9.67	0.07	68
I-80 WB	9.67	9.78	0.11	57
I-80 WB	9.78	10.84	1.06	40
I-80 WB	10.90	12.33	1.43	40

TYPICAL SECTION 1				
ROUTE	SLM		LENGTH (MILES)	PW (FEET)
	FROM	TO		
I-80 EB	8.60	8.72	0.12	49 (AVG.)
I-80 EB	8.72	9.16	0.44	40
I-80 EB	9.16	9.32	0.16	29
I-80 EB	9.32	9.41	0.09	37
I-80 EB	9.43	9.49	0.06	51 (AVG.)
I-80 EB	9.49	9.56	0.07	69
I-80 EB	9.61	9.64	0.03	62
I-80 EB	9.64	9.69	0.05	57
I-80 EB	9.69	9.74	0.05	48 (AVG.)
I-80 EB	9.74	9.94	0.20	40
I-80 EB	9.94	10.16	0.22	27
I-80 EB	10.16	10.83	0.67	40
I-80 EB	10.89	12.33	1.44	40

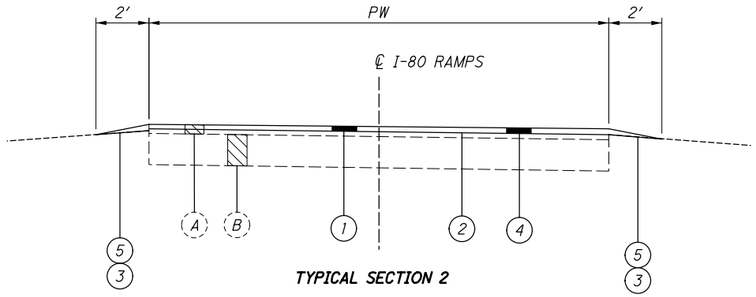
LEGEND

1. ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE (T = 1 ½")
2. ITEM 407, NON-TRACKING TACK COAT @ 0.08 GAL/SY
3. ITEM 408, PRIME COAT, AS PER PLAN @ 0.4 GAL/SY
4. ITEM 442, ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE A (447), AS PER PLAN (T = 1 ½")
5. ITEM 617, COMPACTED AGGREGATE, AS PER PLAN (T = 2")
6. ITEM 618, RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)
7. SAFETY EDGE, SEE SCD BP-3.2 FOR DETAILS *

A. EXISTING ASPHALT CONCRETE SURFACE
B. EXISTING REINFORCED CONCRETE BASE
C. EXISTING CONCRETE MEDIAN

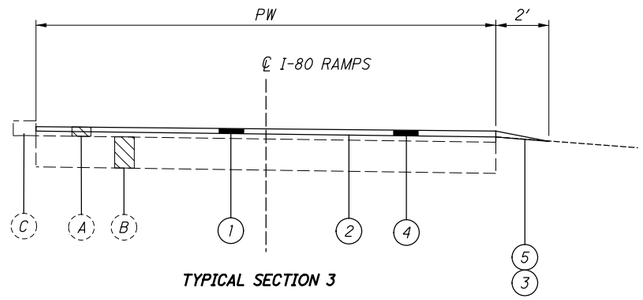
TYPICAL SECTIONS

TRU-80-08.56



TYPICAL SECTION 2

TYPICAL SECTION 2				
ROUTE	SLM		LENGTH (MILES)	PW (FEET)
	FROM	TO		
RAMP A	0.17	0.24	0.07	25 (AVG.)
RAMP A	0.27	0.29	0.02	27
RAMP A	0.29	0.46	0.17	33 (AVG.)
RAMP A	0.46	0.60	0.14	15 (AVG.)
RAMP B	0.14	0.27	0.13	24
RAMP B SPUR	0.00	0.04	0.04	27
RAMP C	0.00	0.07	0.07	12.5 (AVG.)
RAMP C	0.07	0.16	0.09	32.5 (AVG.)
RAMP C	0.16	0.43	0.27	24
RAMP D	0.16	0.34	0.18	24 (AVG.)
RAMP D	0.36	0.47	0.11	22
RAMP E	0.04	0.22	0.18	24
RAMP E	0.22	0.52	0.30	20 (AVG.)



TYPICAL SECTION 3

TYPICAL SECTION 3				
ROUTE	SLM		LENGTH (MILES)	PW (FEET)
	FROM	TO		
RAMP A	0.03	0.04	0.01	55 (AVG.)
RAMP A	0.04	0.17	0.13	27 (AVG.)
RAMP B	0.27	0.38	0.11	30 (AVG.)
RAMP B	0.38	0.41	0.03	28
RAMP D	0.34	0.36	0.02	24

LEGEND

1. ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE (T = 1.5")
2. ITEM 407, NON-TRACKING TACK COAT @ 0.08 GAL/SY
3. ITEM 408, PRIME COAT, AS PER PLAN @ 0.4 GAL/SY
4. ITEM 442, ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE A (447), AS PER PLAN (T = 1.5")
5. ITEM 617, COMPACTED AGGREGATE, AS PER PLAN (T = 2")
6. ITEM 618, RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)
7. SAFETY EDGE, SEE SCD BP-3.2 FOR DETAILS

A. EXISTING ASPHALT CONCRETE SURFACE
B. EXISTING REINFORCED CONCRETE BASE
C. EXISTING CONCRETE MEDIAN

TYPICAL SECTIONS

TRU-80-08.56

UTILITIES

THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS:

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, OHIO811, THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEADQUARTERS (MICHELLE CHANEY AT 330-786-2267) AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ALL AREAS.

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

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

AT&T LONG DISTANCE
C/O METROPOLITAN COMMUNICATIONS GROUP
CHAD HARKNESS
CELL- 770 584 7083
155 COMMERCE PARK DR., SUITE 1
WESTERVILLE,OH 43082
CHAD.HARKNESS@MCGFIBER.COM

CITY OF HUBBARD, OHIO - ELECTRIC & WATER
ATTN: EDWARD PALESTRO, JR.
220 WEST LIBERTY ST.
HUBBARD, OHIO 44425
330-534-6281
330-509-3720 CELL
LINE1023EP@SBCGLOBAL.NET

DIVERSIFIED OIL & GAS CORPORATION
(AKA M & R INVESTMENTS OHIO LLC)
ATTN: TOM VOSICK
1026A COOKSON AVENUE SE
NEW PHILADELPHIA, OH 44663
330-432-4869
TVOSICK@DGASOIL.COM

DOMINION EAST OHIO
ATTN: MICAH RISACHER
320 SPRINGSIDE DRIVE, SUITE 320
AKRON, OH 44333
330-664-2638
440-371-1533 CELL
MICAH.J.RISACHER@DOMINIONENERGY.COM

OHIO EDISON (DISTRIBUTION)
ATTN: MIKE BECK
730 SOUTH AVENUE
YOUNGSTOWN, OH 44502
330-740-7704
330-501-1078 CELL
BECKM@FIRSTENERGYCORP.COM

OHIO EDISON (TRANSMISSION)
FIRST ENERGY SERVICE COMPANY
ATTN: RYAN GRADY
330 252-6379
330 413-2046 CELL
RGRADY@FIRSTENERGYCORP.COM

UTILITY PIPELINE
ATTN: KEVIN KOMARA
4100 HOLIDAY ST NW, SUITE 201
CANTON, OHIO 44718
330-498-9130
KKOMARA@UTILITYPIPELINELTD.COM

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.

PAVEMENT MARKING LANE WIDTHS

THE NORMAL LANE WIDTH FOR THE PAVEMENT MARKINGS ON THIS PROJECT SHALL BE AS FOLLOWS [AT LEAST 3 DAYS PRIOR TO PERFORMING THE WORK CONTACT THE TRAFFIC OFFICE AT 330-786-3147 TO CONFIRM THE WIDTHSJ:

ROUTE	S.L.M. TO	S.L.M.	LANE WIDTH
I-80 EB	8.56	12.33	12'
I-80 WB	8.56	12.33	12'

PAVEMENT MARKING DETAILS

THE PAVEMENT MARKING DETAIL SHEETS WILL BE SUPPLIED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.

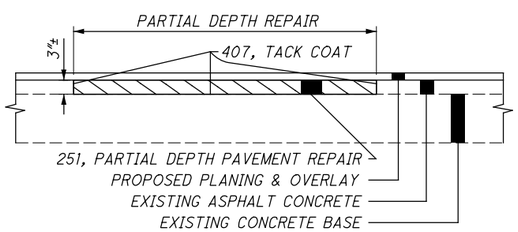
PAVEMENT MARKING DETAILS

THE PAVEMENT MARKING DETAIL SHEETS WILL BE SUPPLIED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING. FOR ANY LOCATIONS THAT PAVEMENT MARKING DETAILS HAVE NOT BEEN MADE AVAILABLE TO THE CONTRACTOR, IT WILL BE THE CONTRACTORS RESPONSIBILITY TO PUT BACK NEW PAVEMENT MARKINGS IN THE ORIGINAL LOCATIONS.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441)

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THE ITEM SHALL CONSIST OF REPAIRING EXISTING LOCATIONS EXHIBITING SURFACE DETERIORATION AND PLACING ITEM 441 ASPHALT CONCRETE, TYPE 2. THE ASPHALT CONCRETE SHALL BE COMPACTED WITH A TYPE I PNEUMATIC TIRE ROLLER AND A STEEL WHEEL ROLLER AS PER 401.13. IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE ENGINEER SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING. ALSO, THIS ITEM SHALL COMMENCE WITHIN 3 DAYS OF THE COMPLETION OF MAINLINE PAVEMENT PLANING. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REPAIR. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

251, PARTIAL DEPTH PAVEMENT REPAIR (441), 5,000 SQ. YD.



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.

TRAFFIC COUNTERS

THE CONTRACTOR WILL CONTACT THE TRAFFIC MONITORING SECTION, FIELD MANAGER AT 614-275-1382, FOURTEEN (14) CALENDAR DAYS PRIOR TO WORK INVOLVING THE TRAFFIC DATA COLLECTION SITE AT SLM 10.77.

ITEM 408 - PRIME COAT, AS PER PLAN

APPLY "MC-70" AT A RATE OF 0.4 GALLONS PER SQUARE YARD, OR AS DETERMINED BY THE ENGINEER, TO THE COMPLETED COMPACTED AGGREGATE SHOULDER.

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE A (447), AS PER PLAN

703.05 DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED 'SR' OR 'SRH' ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

IN LOW SHOULDER AREAS EXCEEDING 1", AND ADJACENT TO THE SAFETY EDGE, OR AS DIRECTED BY THE ENGINEER, RECYCLED ASPHALT PAVEMENT (RAP) SHALL BE USED IN AREAS ADJACENT TO THE PAVED BERM. THE RAP SHALL HAVE A MINIMUM PG CONTENT OF 4.5% AND MEET THE FOLLOWING GRADATION. ONCE THE STOCKPILE MEETS THE GRADATION, THE PG CONTENT OF THE RAP SHALL BE DETERMINED PER 441.03. THE RAP ANALYSIS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO USE. METHOD OF MEASUREMENT SHALL BE AS PER 617.06. PLACEMENT AND COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

MODIFIED GRADATION SHALL APPLY:

SIEVE	TOTAL PERCENT PASSING
1-1/2"	100
3/4"	50-100
NO. 4	35-70
NO. 30	9-33
NO. 200	0-13

ITEM 611 - CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN

THIS ITEM OF WORK SHALL BE IN CONFORMANCE WITH ITEM 611.10.C OF THE CMS, EXCEPT THE EXISTING CATCH BASINS AND APRONS WITH OR WITHOUT RIPRAP CUT OFF WALLS, AS LISTED ON SHEET 14, WILL BE RECONSTRUCTED FROM THE SPRINGLINE UP AND INCLUDE A NEW CASTING, CONCRETE APRON WITH CUT OFF WALL, AND GRATE AS PER SCD CB-3.3.

ALL EQUIPMENT, LABOR, TOOLS, CASTINGS, CONCRETE, STEEL, GRATES, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 611 - CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN.

CLOSED REST AREA PAVEMENT MARKINGS (I-80 WB)

PAVEMENT MARKINGS IN THE EXISTING ACCELERATION AND DECELERATION LANES FOR THE CLOSED REST AREA ON I-80 WB SHALL BE REMOVED. THE MAINLINE WHITE EDGE LINE SHALL BE CARRIED THROUGH THESE LANES AND THE EXISTING MARKINGS OUTSIDE THE EDGE LINES SHALL BE REMOVED. QUANTITIES FOR NEW EDGE LINE ARE INCLUDED IN SHEET 19.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

DECELERATION LANE (FROM BEGINNING TO EXISTING GATE)
SLM 11.64 - 11.83

646, REMOVAL OF PAVEMENT MARKING	575 FT
646, REMOVAL OF PAVEMENT MARKING	0.26 MI

ACCELERATION LANE (FROM GRASS GORE TO END)
SLM 11.04 - 11.33

646, REMOVAL OF PAVEMENT MARKING	675 FT
646, REMOVAL OF PAVEMENT MARKING	0.31 MI

LINEAR GRADING

AREAS WHERE THE SHOULDER IS HIGHER THAN THE EDGE OF PAVEMENT WILL BE GRADED TO PROVIDE POSITIVE DRAINAGE. THIS WORK WILL ONLY BE PERFORMED IN AREAS NECESSARY AND WILL NOT BE PERFORMED ON THE ENTIRE PROJECT. AREAS FOR THE WORK WILL BE MARKED BY THE PROJECT ENGINEER. UNDER NO CIRCUMSTANCES WILL THIS WORK BE PERFORMED CONCURRENTLY WITH ANY OTHER OPERATION.

GRADING WILL BE ACCOMPLISHED BY THE REMOVAL OF MATERIAL TO PROVIDE A 0.08 POSITIVE SLOPE. THE GRADED AREAS WILL BE COMPACTED TO A SUFFICIENT DENSITY TO PREVENT EROSION UNTIL SEEDING AND MULCHING IS PERFORMED. ALL EXCESS MATERIAL WILL BE REMOVED FROM THE BERMS AND WILL BE DISPOSED OF OFF THE PROJECT BY THE CONTRACTOR.

SEEDING AND MUCHING, FERTILIZER AND LIME WILL BE PERFORMED WITHIN A PERIOD NOT TO EXCEED 10 DAYS AFTER THE LINEAR GRADING.

THE QUANTITY OF ITEM 209 IS NOT PERMITED TO BE INCREASED. REDUCTIONS IN QUANTITIES ARE PERMITTED AS DETERMINED BY THE PROJECT ENGINEER.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK WILL BE INCLUDED IN THE UNIT PRICE FOR THE PERTINENT BID ITEM. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

209, LINEAR GRADING, 796 STA.
659, SEEDING AND MULCHING, 22,112 SQ YD
659, COMMERCIAL FERTILIZER, 2.98 TON
659, LIME, 4.56 ACRES
659, WATER, 119.4 M. GAL.

ENHANCED WRONG-WAY TRAFFIC CONTROL FOR RAMPS

WRONG-WAY SIGNAGE ON RAMP B SHALL CONFORM TO SCD TC-73.20. THE CONTRACTOR SHALL PLACE ONE ASSEMBLIE WITH SIGN R5-1a (WRONG WAY) AS PER THE SCD. NO OTHER ADDITIONAL SIGNAGE IS NECESSARY ON RAMP B. THE FOLLOWING ESTIMATED QUANTITIES ARE GIVEN FOR EACH ASSEMBLY:

630, GROUND MOUNTED SUPPORT, NO. 2 POST	21 FT
630, SIGN POST REFLECTOR	4 EA
630, SIGN, FLAT SHEET (TWO R5-1a)	17.5 SF

CALCULATED MJP CHECKED PD

GENERAL NOTES

TRU-80-08.56

MAINTENANCE OF TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

1. A MINIMUM OF ONE ELEVEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK.

2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2208, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.

3. LANE RESTRICTIONS OR LANE REDUCTIONS ON I-80 SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.

4. TRUCK MOUNTED ATTENUATORS [TMA'S] SHALL BE USED AS SHOWN IN THE STANDARD CONSTRUCTION DRAWINGS.

5. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE SUCCESSIVE WORK ZONES UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES OR CONES EXCEEDS TWO (2) MILES RURAL (EAST OF SLM 10.84) OR ONE [1] MILE URBAN (WEST OF SLM 10.84).

6. IN ADDITION TO THE REQUIREMENTS OF 614.11 WORK ZONE PAVEMENT MARKINGS, AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH WORK ZONE MARKINGS) ALL LANE, CENTER, STOP OR CHANNELIZING LINES THAT WERE REMOVED OR COVERED DURING THE PAVEMENT REMOVAL OR PLACEMENT OPERATIONS. QUANTITIES FOR SUCH PLACEMENT ARE CARRIED AS PART OF THE ITEMS LISTED UNDER 614 WORK ZONE PAVEMENT MARKINGS.

7. A QUANTITY OF 20 CU. YDS. OF ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PROVIDED FOR USE IN MAINTAINING PAVEMENT, SHOULDERS AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER.

8. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.

9. THE CONTRACTOR SHALL PLACE THE SIGNS: W8-1 [BUMP] PER OMUTCD 2C.28; W8-11 [UNEVEN LANES] PER OMUCTD 6F.45; AND W6-3 [TWO-WAY TRAFFIC] PER OMUTCD 6F.32. PAYMENT FOR THESE SIGNS SHALL BE INCIDENTAL TO THE LUMP SUM ITEM 614-MAINTAINING TRAFFIC. A QUANTITY OF ITEM 614 WORK ZONE MARKING SIGNS HAS BEEN INCLUDED IN THE PLANS PER CMS 614.04.

10. THE CONTRACTOR SHALL SET A WORK ZONE AT THE REQUEST OF THE ENGINEER TO ALLOW THE LAYOUT OF THE PARTIAL/FULL DEPTH PAVEMENT REPAIR AREAS. THIS WORK IS INCIDENTAL TO ITEM 614 MAINTAINING TRAFFIC.

SIGNS W8-H7 [LOOSE GRAVEL/ FRESH TAR], AND W13-1 [SPEED PLAQUE] SHALL BE PLACED PER STANDARD CONSTRUCTION DRAWING MT-97.12 (MT-97.11), AND PAYMENT FOR THESE SIGNS SHALL BE INCIDENTAL TO THE LUMP SUM ITEM 614- MAINTAINING TRAFFIC. A QUANTITY OF ITEM 614 WORK ZONE MARKING SIGNS HAS BEEN INCLUDED IN THE PLANS PER CMS 614.04.

THE FOLLOWING QUANTITIES SHALL BE USED FOR THE MAINTENANCE OF TRAFFIC ON THIS PROJECT:

PHASE I: MILLED SURFACE
- 614, WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT, 7.62 MILE
- 614, WORK ZONE DOTTED LINE, CLASS I, 6", 642 PAINT, 3050 FT
- 614, WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT, 4350 FT
- 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT, 50 FT
- 614, WORK ZONE MARKING SIGNS (ALL PHASES), 40 EACH

PHASE II: SURFACE COURSE
- 614, WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT, 7.62 MILE
- 614, WORK ZONE DOTTED LINE, CLASS III, 6", 642 PAINT, 3050 FT
- 614, WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT, 4350 FT
- 614, WORK ZONE STOP LINE, CLASS III, 642 PAINT, 50 FT

TO BE USED AS DIRECTED BY THE ENGINEER
- 614, WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT, 17.58 MILE

ITEM 614, MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

CHRISTMAS	FOURTH OF JULY
NEW YEAR'S	LABOR DAY
MEMORIAL DAY	THANKSGIVING

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY OR EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00AM FRIDAY
THURSDAY	(THANKSGIVING ONLY) 6:00AM WEDNESDAY THROUGH 6:00AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

DETOUR NOTIFICATION [ODOT/PENNDOT]

THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-786-3148) AND THE PENNDOT DISTRICT 1 OFFICE (814-678-7085) EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE DETOUR ROUTE SHOULD BE IN EFFECT. ALL WORK ZONE DEVICES REQUIRED SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. PAYMENT FOR ALL WORK ASSOCIATED WITH THE DETOUR SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM 614, DETOUR SIGNING.

TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REPRESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

ADVANCED NOTICE TO PAVE

THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE DISTRICT CONSTRUCTION ENGINEER A DETAILED SCHEDULE 15 DAYS PRIOR TO THE PLACEMENT OF THE OVERLAY COURSES, ON HOW THEY PROPOSE TO PROSECUTE THE PAVING OPERATIONS. THE DETAILS SHALL SHOW THE ORDER OF PERFORMANCE OF EACH STAGE (START TO FINISH) OF THE WORK INCLUDING THE MAINTENANCE OF TRAFFIC THAT WILL BE USED.

ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR) (RAMP CLOSURES)

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 28 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEETS 9-12. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF $7,000 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR) (TRU-80-1050)

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 28 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE CLOSED AS EXPLAINED ON SHEET 6 (SEE EXCEPTION TO PERMITTED LANE CLOSURE CHART). A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF $20,000 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

TIME LIMITATION, TRAFFIC ON A MILLED SURFACE

THE MAXIMUM ALLOWABLE TIME FOR TRAFFIC TO BE PLACED ON A MILLED SURFACE SHALL BE 7 CONSECUTIVE CALENDAR DAYS. SHOULD THE CONTRACTOR FAIL TO MEET THIS REQUIREMENT, THE CONTRACTOR SHALL BE ASSSESSED A DISINCENTIVE IN THE AMOUNT OF $3,000 PER DAY THAT THE TRAFFIC IS PLACED ON A MILLED SURFACE BEYOND THE SPECIFIED LIMIT.

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 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 SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). 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 CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
ROAD & RAMP CLOSURES	>= 2WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	<12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>=2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERNS CHANGES	N/A	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 NOTIFICATION TIME TABLE.

ITEM 614, MAINTAINING TRAFFIC (LANE CLOSURE/ REDUCTION REQUIRED)

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS 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. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

CALCULATED MJP CHECKED PD

MAINTENANCE OF TRAFFIC NOTES

TRU-80-08.56

633 CONTROLLER ITEM MISC: CONTROLLER MODIFICATION
809 ADVANCE RADAR DETECTION
809 STOP-LINE RADAR DETECTION

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING & INSTALLING A WAVETRONIX SMARTSENSOR MATRIX STOP BAR DETECTION UNIT AS WELL AS WAVETRONIX SMARTSENSOR ADVANCE DETECTION UNIT (MODEL SS-200E). THE DETECTION UNIT SHALL INCLUDE THE FOLLOWING:

1. POWER SHALL BE PROVIDED FROM THE TRAFFIC CABINET.
2. ALL REQUIRED INPUTS CARDS SHALL BE INCLUDED IN THE TRAFFIC CABINET AND SHALL BE COMPATIBLE WITH CALTRANS, NEMA TS1 AND NEMA TS2 DETECTOR RACKS. THE CARDS SHALL PROVIDE TRUE PRESENCE DETECTOR CALLS OR CONTACT CLOSURE TO THE TRAFFIC CONTROLLER.
3. THE UNIT SHALL BE MOUNTED DIRECTLY TO A POLE OR MAST ARM, AS RECOMMENDED BY THE MANUFACTURER. CABLE(S) SHALL BE PROVIDED AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER.
4. SURGE PROTECTION DEVICES, AS RECOMMENDED BY THE MANUFACTURER SHALL BE INCLUDED BOTH AT THE POLE WHERE THE UNIT IS LOCATED TO PROTECT THE UNIT AND IN THE TRAFFIC CABINET TO PROTECT THE CABINET ELECTRONICS.
5. THE MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE DURING INSTALLATION AND TESTING AND SHALL PROVIDE ONSITE TRAINING ON THE SETUP, OPERATION AND MAINTENANCE OF THE UNIT.
6. A SERIAL TO ETHERNET COMMUNICATIONS MODULE AND ETHERNET CABLE (MINIMUM 7 FEET).
7. THE POWER SUPPLY AND COMMUNICATION MODULES SHALL BE SECURED TO A SINGLE PANEL THAT CAN BE MOUNTED INTERIOR TO THE TRAFFIC CABINET. THE PANEL SHALL INCLUDE MODULAR-PLUG STYLE CONNECTIONS FOR UP TO FOUR (4) SENSOR CABLES. ADDITIONAL SENSORS MAY BE HARD-WIRED TO THE COMMUNICATION MODULES, AS NECESSARY.
8. THE CONTRACTOR SHALL INSTALL THE RADAR DETECTION PRIOR TO MILLING THE EXISTING LOOPS IN ORDER TO PREVENT TRAFFIC SIGNAL DELAY.
9. THE CONTRACTOR SHALL CONTACT THE DISTRICT OFFICE (330-786-2267) THREE WORKING DAYS PRIOR TO INSTALLING THE DETECTION TO REMOVE THE CABINET LOCKS. ANY LOOP DETECTORS DISTURBED BY THE PLANING SHOULD BE ABANDONED IN PLACE.
10. THE CONTRACTOR SHALL DISCONNECT AND LEAVE THE LOOP DETECTOR AMPLIFIERS IN THE CONTROLLER.

PAYMENT FOR ITEM 809 ADVANCE RADAR DETECTION AND ITEM 809 STOP-LINE RADAR DETECTION SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH UNIT, COMPLETE AND IN PLACE INCLUDING ALL REQUIRED CABINET HARDWARE, MOUNTING BRACKETS, CABLES, CONDUIT, CONNECTIONS TESTED AND ACCEPTED, AND ANY OTHER NECESSARY HARDWARE TO ESTABLISH A FULLY FUNCTIONAL DETECTION SYSTEM.

THE CONTRACTOR SHALL DISCONNECT AND LEAVE THE LOOP DETECTOR AMPLIFIERS IN THE CONTROLLER.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE WORK AND FOR DISCONNECTING THE LOOP UNITS FROM THE CONTROLLER:

INTERSECTION	SLM	ADVANCE RADAR DETECTION	STOP-LINE RADAR DETECTION
I-80 WB @ US 62/SR 7	9.58	2 (NB, SB)	4 (ALL)
TOTALS CARRIED TO GENERAL SUMMARY:		2	4

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. [AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.]

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
ROAD & RAMP CLOSURE	>= 2WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	<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 DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

LANE CLOSURES

DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AS PER THE PERMITTED LANE CLOSURE CHART. THE PERMITTED LANE CLOSURE CHART USED FOR THIS PROJECT SHALL BE THE MOST CURRENT CHART AVAILABLE ON THE DATE THIS PROJECT SELLS.

THE CHART CAN BE FOUND AT:
http://plcm.dot.state.oh.us

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THE REQUIREMENTS IN THE CHART, THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES IN THE AMOUNT OF $8,000 PER HOUR OR PORTION THEREOF THAT THE LANE REDUCTION REMAINS BEYOND THE SPECIFIED LIMIT.

EXCEPTION TO PERMITTED LANE CLOSURE CHART (TRU-80-1050)

ALL LANES OF I-80 MAY BE CLOSED FOR SHORT DURATIONS ACCORDING TO SCD MT-99.60 TO REMOVE THE BRIDGE DECK, RAILINGS, AND STEEL BEAMS ON STRUCTURE TRU-80-1050. THESE CLOSURES MAY ONLY OCCUR BETWEEN MIDNIGHT - 5:00 AM. SEE STRUCTURE PLANS FOR MORE INFORMATION.

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 REQUIREMENTS OF CMS 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) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.
- DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).
- 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).

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.

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, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONE.

THE LEOS WORK AT THE DIRECTION OF THE ENGINEER. 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 100 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.

CALCULATED MJP CHECKED PD

MAINTENANCE OF TRAFFIC NOTES

TRU-80-08.56

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A PORTABLE 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 DISTANCE 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. PCMS TRAILERS SHOULD BE DELINEATED.

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 PCMS SHOULD NOT BE LOCATED IN THE MEDIAN OF THE HIGHWAY UNLESS IT IS PROTECTED FROM BOTH DIRECTIONS OF TRAFFIC. 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 THE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS WILL BE OFF. ADDITIONALLY WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED, FACING AWAY FROM ALL TRAFFIC AND SHALL DISPLAY ONE OR MORE TYPE G YELLOW REFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE 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 CONTRACTOR. A LIST OF ALL PROPOSED PREPROGRAMMED MESSAGES WILL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION. 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 OF 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, DE-ACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL [IN ACTIVE CELLULAR AREAS] ALLOW REMOTE SIGN ACTIVATION, DEACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF 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 WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24 HOURS PER DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THEIR USE. THE REQUIREMENT TO FURNISH, INSTALL, MAINTAIN AND REMOVE A PCMS UNIT ON THIS PROJECT SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES AS OUTLINED IN 614.02.

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

614 PORTABLE CHANGEABLE MESSAGE SIGN,
AS PER PLAN, 24 SIGN MONTH
ASSUMING 4 SIGNS FOR 6 MONTHS

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-SECTION	DIRECTION
WZ-26123	TRU-80-8.18 / 12.33	EB
WZ-26123	TRU-80-8.46 / 12.33	WB

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRECONSTRUCTION) 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 THE NOTE, APPROVED LIST, SUPPLEMENTAL SPECIFICATIONS (SS) 808 AND 908, AND TRAFFIC SCD MT-104.10.]

[WZSZS USING TEMPORARY FLATSHEET 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, PRECONSTRUCTION, 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 OR GREATER) 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 808, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY
84 SIGN MONTH
ASSUMING 14 DSL SIGN ASSEMBLIES FOR 6 MONTHS

CALCULATED MJP CHECKED PD

MAINTENANCE OF TRAFFIC NOTES

TRU-80-08.56

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 12 EACH

MAINTENANCE OF TRAFFIC SIGNAL/FLASHER INSTALLATION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SIGNAL/FLASHER INSTALLATIONS WITHIN THE PROJECT UNDER THE FOLLOWING CONDITIONS:

1. EXISTING SIGNAL/FLASHER INSTALLATIONS WHICH THE PLANS REQUIRE THE CONTRACTOR TO ADJUST, MODIFY, ADD ONTO OR REMOVE, OR WHICH THE CONTRACTOR ACTUALLY ADJUSTS, MODIFIES OR OTHERWISE DISTURBS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE INSTALLATION (AT AN INTERSECTION) FROM THE TIME HIS OPERATIONS FIRST DISTURB THE INSTALLATION UNTIL THE INSTALLATION HAS BEEN SUBSEQUENTLY REMOVED OR MODIFIED AND THE WORK IS ACCEPTED.

2. NEW OR REUSED SIGNAL/FLASHER INSTALLATIONS OR DEVICES, INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THESE FROM THE TIME OF INSTALLATION UNTIL THE WORK IS ACCEPTED.

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. HE SHALL PROVIDE THE MAINTAINING AGENCY AND THE ENGINEER SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES CAN BE CONTACTED. THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS READILY AVAILABLE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK. ALL LAMP OUTAGES, CABLE OUTAGES, ELECTRICAL FAILURES, EQUIPMENT MALFUNCTIONS AND MISALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK TO SERVICE WITHIN FOUR HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE, ALL DAMAGED EQUIPMENT EXCEPT POLES AND CONTROL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHIN 8 HOURS AFTER THE CONTRACTOR'S NOTIFICATION OF THE OUTAGE. THE CONTRACTOR SHALL ARRANGE FOR FULL TRAFFIC CONTROL UNTIL THE SIGNAL IS BACK IN OPERATION. IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHIN THE ALLOWED 8-HOUR PERIOD, AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENT AS SOON THEREAFTER AS POSSIBLE.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHERE MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION THEN THE ALLOTTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE.

WHERE OUTAGES ARE THE DIRECT RESULT OF A VEHICLE ACCIDENT THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE.

WHERE THE CONTRACTOR HAS FAILED TO, OR CANNOT RESPOND TO, AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION, AT THESE LOCATIONS WITHIN HIS RESPONSIBILITY, WITHIN PERIODS AS SPECIFIED ABOVE, THE ENGINEER MAY INVOKE THE PROVISIONS OF SECTION 105.15 AND ANY SUBSEQUENT BILLINGS TO THE STATE OR THE CITY OF HUBBARD FOR POLICE SERVICES AND MAINTENANCE SERVICES BY CITY FORCES SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15.

THE CONTRACTOR SHALL PROVIDE THE MAINTENANCE SERVICE ENTIRELY WITH HIS FORCES OR HE MAY CHOOSE TO ENTER INTO A COOPERATIVE UNDERSTANDING WITH THE LOCAL MAINTAINING AGENCY TO PROVIDE THE MAINTENANCE. THE CONTRACTOR SHALL INFORM THE ENGINEER, IN WRITING, OF THE MAINTENANCE METHOD SELECTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISIONS TO THE SIGNAL SYSTEM. WHEN A TRAFFIC SIGNAL MUST BE TAKEN OUT OF SERVICE BY THE CONTRACTOR, DUE TO CONST-RUCTION PROCEDURES, THIS OUTAGE SHALL NOT EXCEED 8 HOURS AND SHALL NOT INCLUDE THE HOURS OF 6AM-9AM TO 3PM-5PM. ANY SIGNALIZED INTERSECTION, WHERE THE SIGNAL IS OUT OF SERVICE DUE TO CONSTRUCTION PROCEDURES, OR DUE TO AN OUTAGE OR MALFUNCTION OF EQUIPMENT AS DESCRIBED ABOVE, SHALL BE PROTECTED, BY THE CONTRACTOR, BY THE INSTALLATION OF TEMPORARY "STOP" SIGNS, EXCEPT FOR THE FOLLOWING INTERSECTIONS WHICH SHALL BE PROTECTED BY OFF-DUTY CITY OF HUBBARD POLICE, HIRED BY THE CONTRACTOR:

1. US 62 / SR 7 @ I-80 RAMPS A/B

ANY VEHICULAR TRAFFIC SIGNAL HEAD, EITHER NEW OR EXISTING WHICH WILL BE OUT OF OPERATION SHALL BE COVERED IN THE MANNER DESCRIBED IN 632.25.

THE CONTRACTOR SHALL MAINTAIN COMPLETE RECORDS OF MALFUNCTIONS INCLUDING:

1. TIME OF NOTIFICATION OF MALFUNCTION;

2. TIME OF WORK CREWS ARRIVAL TO CORRECT THE MALFUNCTION;

3. ACTIONS TAKEN TO CORRECT THE MALFUNCTION, INCLUDING A LIST OF PARTS REPAIRED OR REPLACED;

4. A DIAGNOSIS OF REASON FOR THE MALFUNCTION AND PROBABILITY OF REOCCURRENCE;

5. TIME OF COMPLETION OF THE REPAIR AND SYSTEM RESTORED TO FULL SERVICE.

A COPY OF THESE RECORDS SHALL BE PROVIDED TO THE ENGINEER WITHIN THREE (3) WORKING DAYS FOLLOWING COMPLETION OF EACH REPAIR.

ALL COSTS RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

WORK ZONE MEDIAN PROTECTION

THESE WORK ITEMS WILL BE USED TO PROTECT EQUIPMENT IN THE MEDIAN AND MAINTAIN TRAFFIC FOR THE REMOVAL OF STRUCTURE TRU-80-1050. THE FOLLOWING QUANTITIES SHALL BE USED AT THE DIRECTION OF THE ENGINEER:

ITEM 614, WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS (UNIDIRECTIONAL)	2 EACH
ITEM 614, BARRIER REFLECTOR, TYPE 1 (ONE WAY)	8 EACH
ITEM 614, OBJECT MARKER, ONE WAY	8 EACH
ITEM 622, PORTABLE BARRIER, UNANCHORED	300 FT

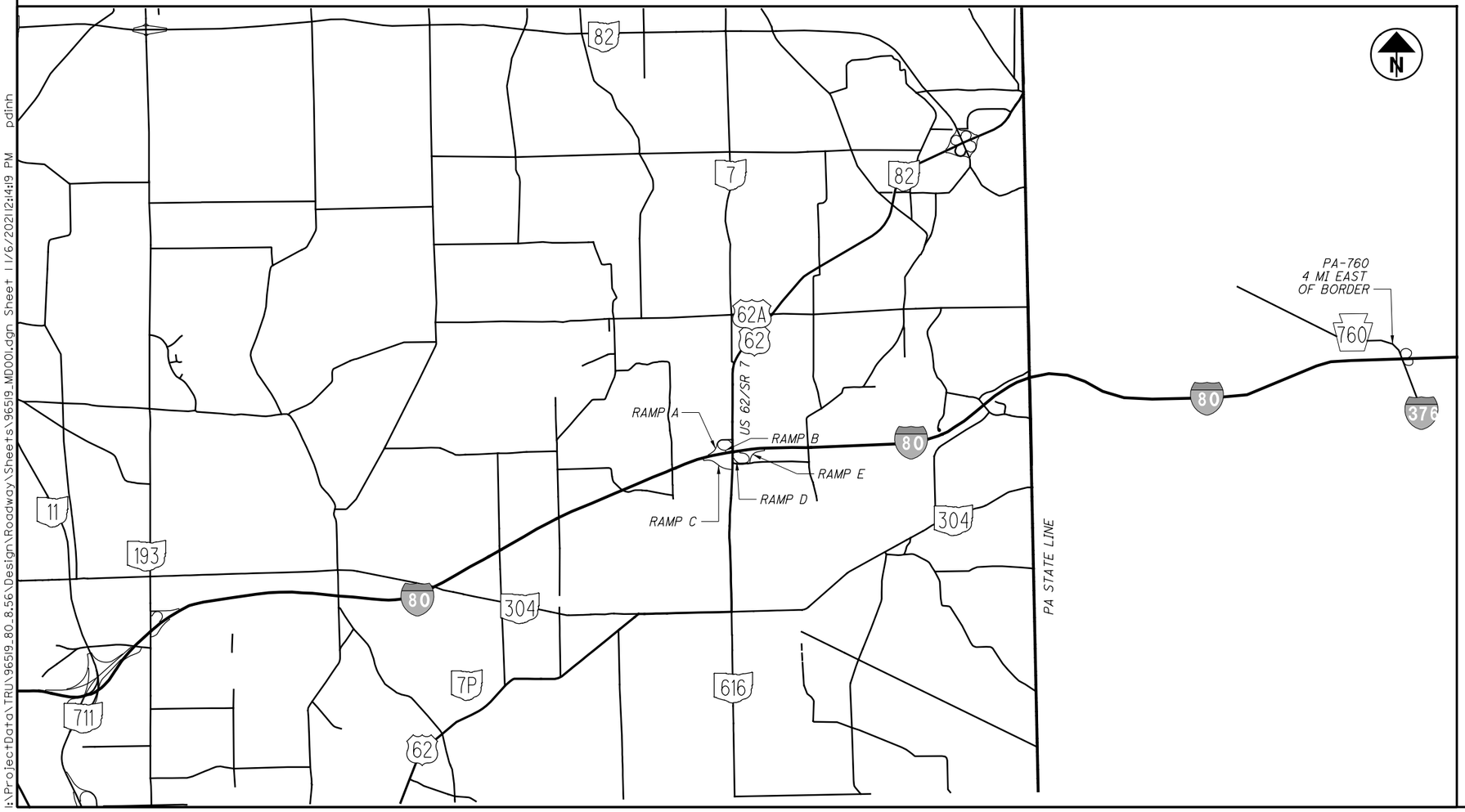
CALCULATED MJP CHECKED PD

MAINTENANCE OF TRAFFIC NOTES

TRU-80-08.56

RAMP CLOSURES

RAMP	LENGTH (MILES)	AVERAGE WIDTH (FEET)	PERMITTED CLOSURE TIMES	DURATION	DETOUR ROUTE	APPROX. # PCMS	ADDITIONAL RESTRICTIONS / INFO	DISINCENTIVES (PER HOUR)
RAMP A US 62/SR 7 TO I-80 WB	0.57	25	9:00 PM - 5:00 AM	4 NIGHTS	I-80 EB / PA-760	7	CANNOT CLOSE WITH RAMP E	$5,000
RAMP B I-80 WB TO US 62/SR 7	0.27	27	9:00 PM - 6:00 AM	3 NIGHTS	I-80 WB / SR 193 / I-80 EB	4	CANNOT CLOSE WITH RAMPS C OR D	$5,000
RAMP C I-80 EB TO US 62/SR 7 SB	0.43	24	9:00 PM - 7:00 AM	4 NIGHTS	I-80 EB / PA-760 / I-80 WB	7	CANNOT CLOSE WITH RAMP B	$5,000
RAMP D I-80 EB TO US 62/SR 7 NB	0.31	23	8:00 PM - 6:00 AM	4 NIGHTS	I-80 EB / PA-760 / I-80 WB	7	CANNOT CLOSE WITH RAMP B	$5,000
RAMP E US 62/SR 7 TO I-80 EB	0.48	22	9:00 PM - 5:00 AM	3 NIGHTS	I-80 WB / SR 193	5	CANNOT CLOSE WITH RAMP A	$5,000



PLACE PCMS 5 DAYS IN ADVANCE OF EACH CLOSURE:

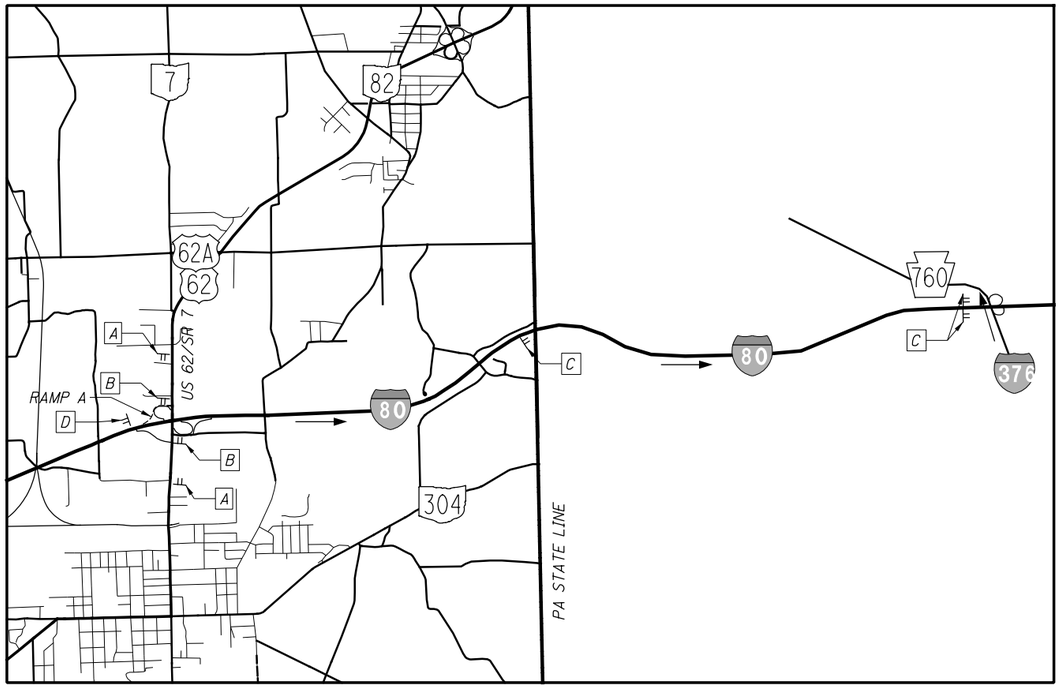
1. *RAMP TO _____ TO CLOSE*
2. *__/__/__ __ PM TO __ AM*

CALCULATED MJP
CHECKED PD

DETOUR PLAN

TRU-80-08.56

DETOUR PLAN - RAMP A (US 62/SR 7 TO I-80 WB)



A - PCMS MESSAGES:

1. RAMP TO I-80 WB CLOSED
2. __ PM TO __AM FOR _ NIGHTS

B - PCMS MESSAGES:

1. RAMP TO I-80 WB CLOSED
2. DETOUR I-80 EB

C - PCMS MESSAGES:

1. DETOUR I-80 WB
2. USE EXIT 4B PA-760 N

D

END DETOUR

M4-8a-24

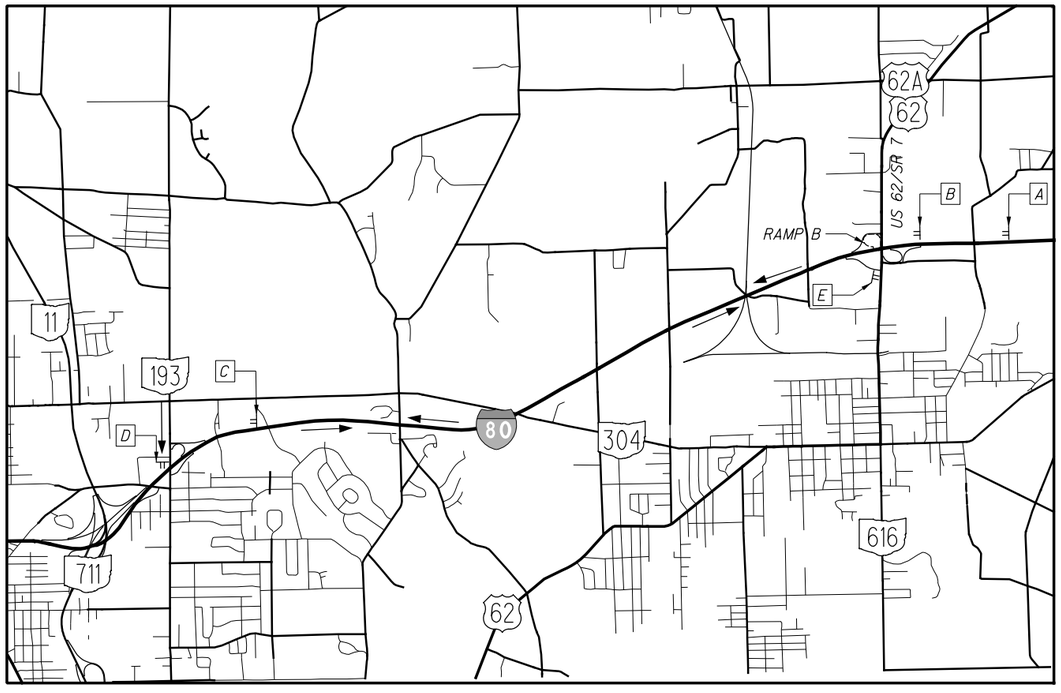
N

RAMP A DETOUR ROUTE: I-80 EB / PA-760

------- CLOSE RAMP A PER SCD MT-101.60

REFER TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIG. 6H-8 (TYPICAL APPLICATION 8), FOR SIGN SPACING.

DETOUR PLAN - RAMP B (I-80 WB TO US 62/SR 7)



A - PCMS MESSAGES:

1. EXIT 234 CLOSED
2. __ PM TO __AM FOR _ NIGHTS

B - PCMS MESSAGES:

1. EXIT 234 CLOSED
2. DETOUR FOLLOW I-80 WB

C - PCMS MESSAGES:

1. DETOUR US62/SR7
2. USE SR 193 SB

D - PCMS MESSAGES:

1. DETOUR US62/SR7
2. USE I-80 EB

E

END DETOUR

M4-8a-24

N

RAMP B DETOUR ROUTE: I-80 WB / SR 193 / I-80 EB

------- CLOSE RAMP B PER SCD MT-98.29

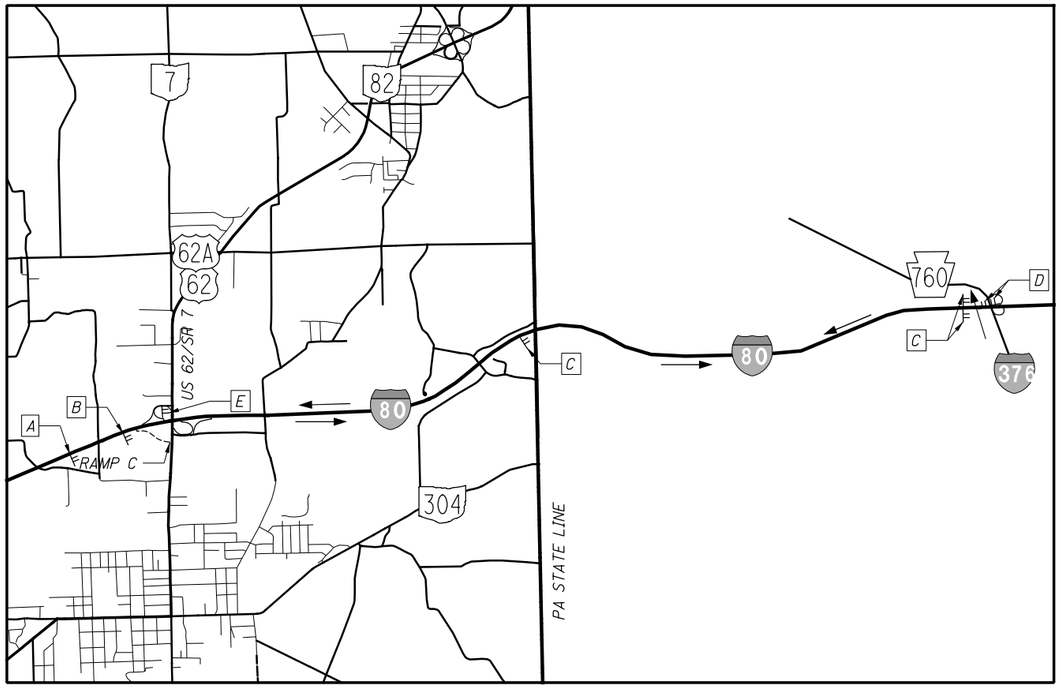
REFER TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIG. 6H-8 (TYPICAL APPLICATION 8), FOR SIGN SPACING.

CALCULATED MJP CHECKED PD

DETOUR PLAN

TRU-80-08.56

DETOUR PLAN - RAMP C (I-80 EB TO US 62/SR 7 SB)



A - PCMS MESSAGES:

1. EXIT 234A CLOSED
2. -- PM TO --AM FOR - NIGHTS

B - PCMS MESSAGES:

1. EXIT 234A CLOSED
2. DETOUR FOLLOW I-80 EB

C - PCMS MESSAGES:

1. DETOUR EXIT 234A
2. USE EXIT 4B PA-760 N

D - PCMS MESSAGES:

1. DETOUR EXIT 234A
2. USE I-80 WB

E

END DETOUR

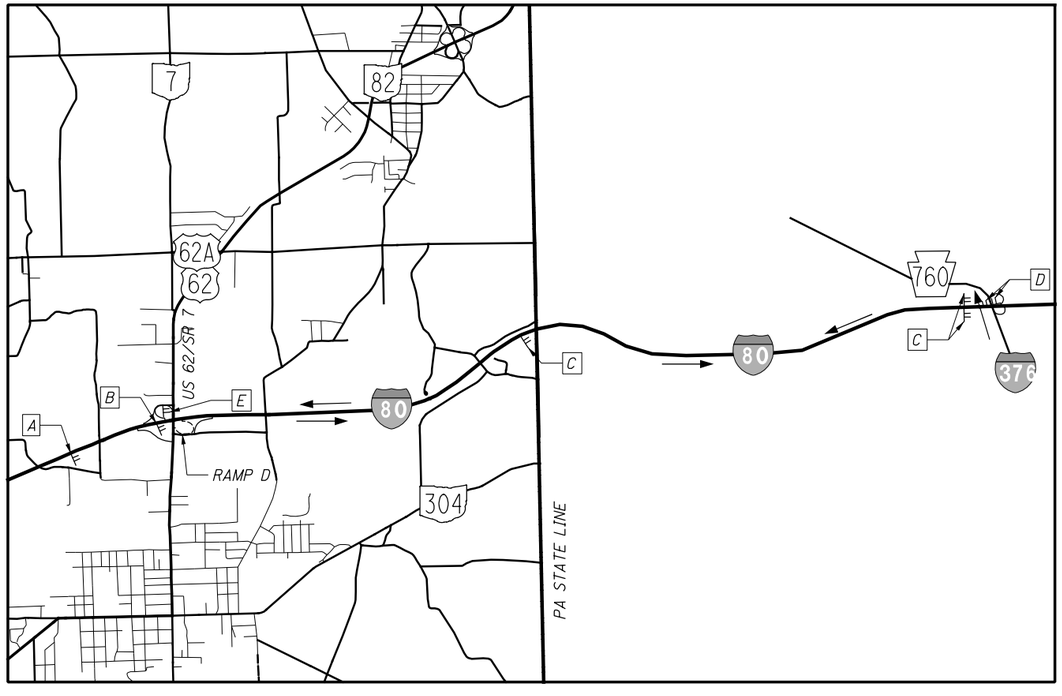
M4-8a-24

RAMP C DETOUR ROUTE: I-80 EB / PA-760 / I-80 WB

------- CLOSE RAMP C PER SCD MT-98.29

REFER TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIG. 6H-8 (TYPICAL APPLICATION 8), FOR SIGN SPACING.

DETOUR PLAN - RAMP D (I-80 EB TO US 62/SR 7 NB)



A - PCMS MESSAGES:

1. EXIT 234B CLOSED
2. -- PM TO --AM FOR - NIGHTS

B - PCMS MESSAGES:

1. EXIT 234B CLOSED
2. DETOUR FOLLOW I-80 EB

C - PCMS MESSAGES:

1. DETOUR EXIT 234B
2. USE EXIT 4B PA-760 N

D - PCMS MESSAGES:

1. DETOUR EXIT 234B
2. USE I-80 WB

E

END DETOUR

M4-8a-24

RAMP D DETOUR ROUTE: I-80 EB / PA-760 / I-80 WB

------- CLOSE RAMP D PER SCD MT-98.29

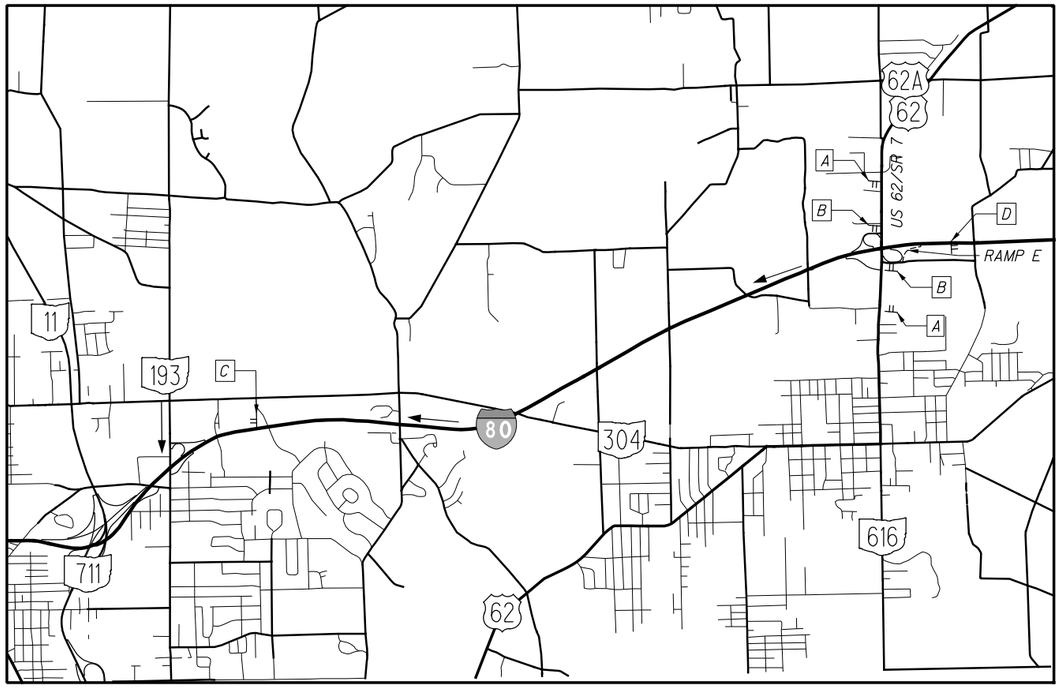
REFER TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIG. 6H-8 (TYPICAL APPLICATION 8), FOR SIGN SPACING.

CALCULATED MJP CHECKED PD

DETOUR PLAN

TRU-80-08.56

DETOUR PLAN - RAMP E (US 62/SR 7 TO I-80 EB)



A - PCMS MESSAGES:

1. RAMP TO I-80 EB CLOSED
2. -- PM TO --AM FOR - NIGHTS

B - PCMS MESSAGES:

1. RAMP TO I-80 EB CLOSED
2. DETOUR FOLLOW I-80 WB

C - PCMS MESSAGES:

1. DETOUR I-80 EB
2. USE SR 193 SB

D

END DETOUR

M4-8a-24

RAMP E DETOUR ROUTE: I-80 WB / SR 193

------- CLOSE RAMP E PER SCD MT-101.60

REFER TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIG. 6H-8 (TYPICAL APPLICATION 8), FOR SIGN SPACING.

CALCULATED MJP
CHECKED PD

DETOUR PLAN

TRU-80-08.56

12
29

I:\Project Data\TRU\96519_80_8.56\Design\Roadway\Sheets\96519_MD001.dgn Sheet 4 1/6/2021 2:44:30 PM pdinh

SHEET NUM.												PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
		4	5	6	7	8	15	16	17	18	19	01/IMS/PV						
																	ROADWAY	
		796										796	209	60200	796	STA	LINEAR GRADING	
						300						300	622	41100	300	FT	PORTABLE BARRIER, UNANCHORED	
																	EROSION CONTROL	
							54					54	601	10000	54	SY	RIPRAP	
							36					36	659	00300	36	CY	TOPSOIL	
		22,122					270					22,392	659	10000	22,392	SY	SEEDING AND MULCHING	
		2.98					0.04					3.02	659	20000	3.02	TON	COMMERCIAL FERTILIZER	
		4.56					0.06					4.62	659	31000	4.62	ACRE	LIME	
		119.4					1.5					120.9	659	35000	120.9	MGAL	WATER	
												3,000	832	30000	3,000	EACH	EROSION CONTROL	
																	DRAINAGE	
							9					9	611	98635	9	EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	4
																	PAVEMENT	
		5,000										5,000	251	01000	5,000	SY	PARTIAL DEPTH PAVEMENT REPAIR (441)	
								101,863	98,678			200,541	254	01000	200,541	SY	PAVEMENT PLANING, ASPHALT CONCRETE (T = 1 1/2")	
								8,150	7,895			16,045	407	20000	16,045	GAL	NON-TRACKING TACK COAT	
								4,121	4,441			8,562	408	10001	8,562	GAL	PRIME COAT, AS PER PLAN	4
								4,245	4,113			8,358	442	10301	8,358	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN	4
								596	617			1,213	617	10101	1,213	CY	COMPACTED AGGREGATE, AS PER PLAN	4
								9	6			15	618	40600	15	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	
																	TRAFFIC CONTROL	
										520		520	621	00100	520	EACH	RPM	
										416		416	621	54000	416	EACH	RAISED PAVEMENT MARKER REMOVED	
		21										21	630	02100	21	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
		4										4	630	08600	4	EACH	SIGN POST REFLECTOR	
		17.5										17.5	630	80100	17.5	SF	SIGN, FLAT SHEET	
											17.58	17.58	642	00104	17.58	MILE	EDGE LINE, 6", TYPE 1	
											7.62	7.62	642	00204	7.62	MILE	LANE LINE, 6", TYPE 1	
											4,350	4,350	642	00404	4,350	FT	CHANNELIZING LINE, 12", TYPE 1	
											50	50	642	00500	50	FT	STOP LINE, TYPE 1	
											4	4	642	01322	4	EACH	WRONG WAY ARROW, TYPE 1	
											3,050	3,050	642	01510	3,050	FT	DOTTED LINE, 6", TYPE 1	
		1,250										1,250	646	50100	1,250	FT	REMOVAL OF PAVEMENT MARKING	
		0.57										0.57	646	50300	0.57	MILE	REMOVAL OF PAVEMENT MARKING	
																	TRAFFIC SIGNALS	
				LS								LS	633	99300	LS		CONTROLLER ITEM, MISC.: CONTROLLER MODIFICATION	6
				2								2	809	69000	2	EACH	ADVANCE RADAR DETECTION	
				4								4	809	69100	4	EACH	STOP LINE RADAR DETECTION	
																	STRUCTURE REPAIRS	
																	FOR TRU-80-0632 ESTIMATED QUANTITIES	22
																	FOR TRU-80-0742 ESTIMATED QUANTITIES	22
																	FOR TRU-80-0798 ESTIMATED QUANTITIES	22
																	FOR TRU-80-0855R ESTIMATED QUANTITIES	22
																	FOR TRU-80-0856L ESTIMATED QUANTITIES	22
																	FOR TRU-80-0905 ESTIMATED QUANTITIES	22
																	FOR TRU-80-0941L ESTIMATED QUANTITIES	22
																	FOR TRU-80-0941RL ESTIMATED QUANTITIES	22
																	FOR TRU-80-0942R ESTIMATED QUANTITIES	22
																	FOR TRU-80-0957R ESTIMATED QUANTITIES	23
																	FOR TRU-80-0958L ESTIMATED QUANTITIES	23
																	FOR TRU-80-1026 ESTIMATED QUANTITIES	23
																	FOR TRU-80-1050 ESTIMATED QUANTITIES	23
																	FOR TRU-80-1084R ESTIMATED QUANTITIES	23
																	FOR TRU-80-1085L ESTIMATED QUANTITIES	23
																	FOR TRU-80-1185 ESTIMATED QUANTITIES	23

CALCULATED MJP
CHECKED PD

GENERAL SUMMARY

TRU-80-08.56

SHEET NUM.													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
		4	5	6	7	8	15	16	17	18	19		01/IMS/PV						
																		MAINTENANCE OF TRAFFIC	
				100									100	614	11110	100	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
						2							2	614	12336	2	EACH	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	
			LS										LS	614	12420	LS		DETOUR SIGNING	
			40										40	614	12460	40	EACH	WORK ZONE MARKING SIGN	
						12							12	614	12484	12	EACH	WORK ZONE INCREASED PENALTIES SIGN	
			20										20	614	13000	20	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
						8							8	614	13310	8	EACH	BARRIER REFLECTOR, TYPE 1 (ONE WAY)	
						8							8	614	13350	8	EACH	OBJECT MARKER, ONE WAY	
					24								24	614	18601	24	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	7
			7.62										7.62	614	20110	7.62	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	
			7.62										7.62	614	20560	7.62	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
			17.58										17.58	614	22360	17.58	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
			4,350										4,350	614	23210	4,350	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT	
			4,350										4,350	614	23690	4,350	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	
			3,050										3,050	614	24202	3,050	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 642 PAINT	
			3,050										3,050	614	24612	3,050	FT	WORK ZONE DOTTED LINE, CLASS III, 6", 642 PAINT	
			50										50	614	26200	50	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
			50										50	614	26610	50	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
					84								84	808	18700	84	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
																		INCIDENTALS	
													LS	614	11000	LS		MAINTAINING TRAFFIC	
													6	619	16010	6	MNTH	FIELD OFFICE, TYPE B	
													LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
													LS	624	10000	LS		MOBILIZATION	

CALCULATED MJP
CHECKED PD

GENERAL SUMMARY

TRU-80-08.56

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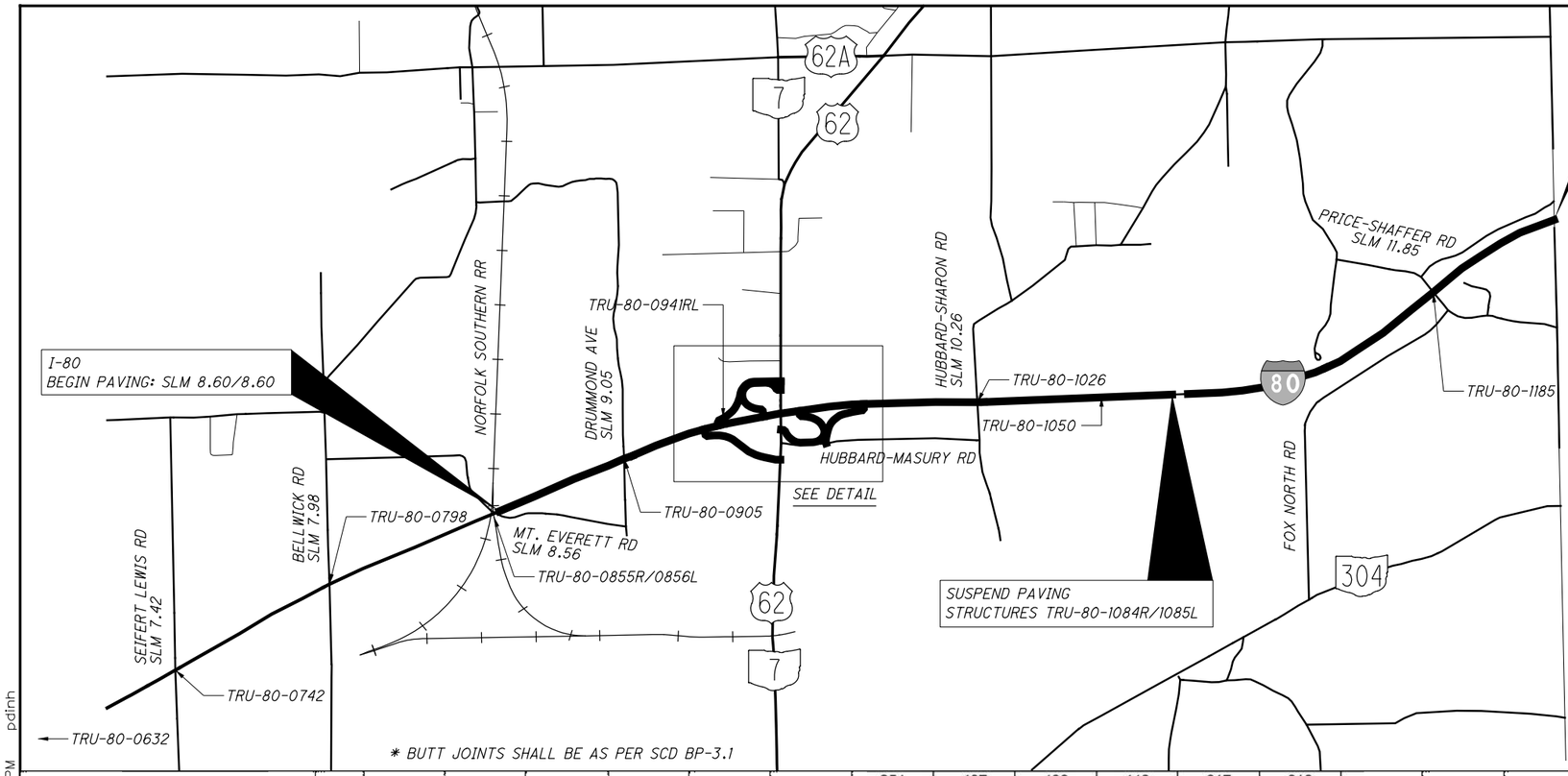
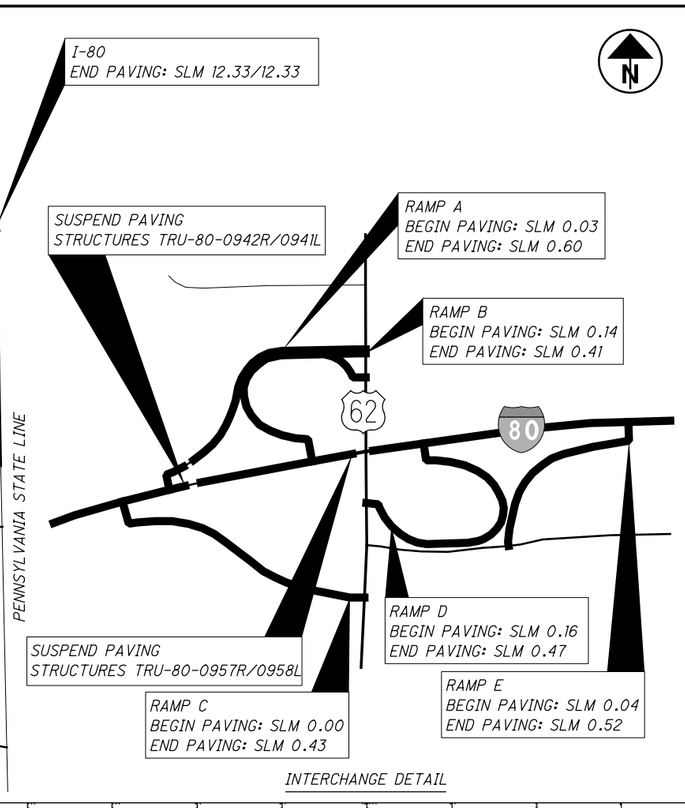
REF NO.	ROUTE	LOCATION (S.L.M.)			203 EMBANKMENT CY	601 RIPRAP SY	611 MANHOLE RECONSTRUCTED TO GRADE EACH	611 CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN EACH	659 TOPSOIL CY	659 SEEDING AND MULCHING SY	659 COMMERCIAL FERTILIZER TON	659 LIME ACRE	659 WATER MGAL					COMMENTS
1	I-80	9.96	MEDIAN LEFT			6		1	4	30	0.004	0.006	0.16					
2	I-80	9.96	MEDIAN RIGHT			6		1	4	30	0.004	0.006	0.16					
3	I-80	10.22	MEDIAN LEFT			6		1	4	30	0.004	0.006	0.16					
4	I-80	10.22	MEDIAN RIGHT			6		1	4	30	0.004	0.006	0.16					
5	I-80	10.53	MEDIAN LEFT			6		1	4	30	0.004	0.006	0.16					
6	I-80	10.72	MEDIAN RIGHT			6		1	4	30	0.004	0.006	0.16					
7	I-80	10.98	MEDIAN RIGHT			6		1	4	30	0.004	0.006	0.16					
8	I-80	11.14	MEDIAN LEFT			6		1	4	30	0.004	0.006	0.16					
9	I-80	12.13	MEDIAN RIGHT			6		1	4	30	0.004	0.006	0.16					
TOTALS CARRIED TO GENERAL SUMMARY						54		9	36	270	0.04	0.06	1.5					

CALCULATED MJP
CHECKED PD

CATCH BASIN SUBSUMMARY

TRU-80-08.56





INTERCHANGE DETAIL

SLM RANGE			TYPICAL SECTION	SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA		254 PAVEMENT PLANING, ASPHALT CONCRETE (T = 1 1/2")	407 NON-TRACKING TACK COAT @ 0.08 GAL/SY	408 PRIME COAT, AS PER PLAN @ 0.4 GAL/SY	442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN (T = 1 1/2")	617 COMPACTED AGGREGATE, AS PER PLAN (T = 2")	618 RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)											
					FT	FT	SY	SY		SY	GAL	GAL	CY	CY	MILE										
I-80 EB																								
8.60	TO	8.72	1		633.60	49	3414.40			3414.40	273.15	112.64	142.27	15.64	0.24									
8.72	TO	9.16	1		2323.20	40	10325.33			10325.33	826.03	413.01	430.22	57.36	0.88									
9.16	TO	9.32	1		844.80	29	2722.13			2722.13	217.77	150.19	113.42	20.86	0.32									
9.32	TO	9.41	1		475.20	37	1953.60			1953.60	156.29	84.48	81.40	11.73	0.18									
9.43	TO	9.49	1		316.80	51	1777.60			1777.60	142.21	56.32	74.07	7.82	0.12									
9.49	TO	9.56	1		369.60	69	2833.60			2833.60	226.69	65.71	118.07	9.13	0.14									
9.61	TO	9.64	1		158.40	62	1091.20			1091.20	87.30	28.16	45.47	3.91	0.06									
9.64	TO	9.69	1		264.00	57	1672.00			1672.00	133.76	46.93	69.67	6.52	0.10									
9.69	TO	9.74	1		264.00	48	1408.00			1408.00	112.64	46.93	58.67	6.52	0.10									
9.74	TO	9.94	1		1056.00	40	4693.33			4693.33	375.47	187.73	195.56	26.07	0.40									
9.94	TO	10.16	1		1161.60	27	3484.80			3484.80	278.78	206.51	145.20	28.68	0.44									
10.16	TO	10.83	1		3537.60	40	15722.67			15722.67	1257.81	628.91	655.11	87.35	1.34									
10.89	TO	12.33	1		7603.20	40	33792.00			33792.00	2703.36	1351.68	1408.00	187.73	2.88									
I-80 WB																								
8.60	TO	8.62	1		105.60	52	604.27			604.27	48.34	18.77	25.18	2.61	0.04									
8.62	TO	9.08	1		2428.80	40	10794.67			10794.67	863.57	431.79	449.78	59.97	0.92									
9.08	TO	9.37	1		1531.20	30	5104.00			5104.00	408.32	272.21	212.67	37.81	0.58									
9.37	TO	9.39	1		105.60	40	469.33			469.33	37.55	18.77	19.56	26.07	0.04									
								SUBTOTALS	0.00	101862.9	8149.0	4120.75	4244.29	595.79	8.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
								TOTALS CARRIED TO GENERAL SUMMARY	0	101863	8150	4121	4245	596	9	0	0	0	0	0	0	0	0	0

CALCULATED MJP
CHECKED PD

PAVEMENT CALCULATIONS

TRU-80-08.56

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SLM RANGE			TYPICAL SECTION	SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA		254 PAVEMENT PLANING, ASPHALT CONCRETE (T = 1 1/2")	407 NON-TRACKING TACK COAT @ 0.08 GAL/SY	408 PRIME COAT, AS PER PLAN @ 0.4 GAL/SY	442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN (T = 1 1/2")	617 COMPACTED AGGREGATE, AS PER PLAN (T = 2")	618 RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)											
					FT	FT	SY	SY		SY	GAL	GAL	CY	CY	MILE												
I-80 WB CONT'D																										
9.41	TO	9.45	1		211.20	45	1056.00			1056.00	84.48	37.55	44.00	5.21	0.08											
9.45	TO	9.53	1		422.40	58	2722.13			2722.13	217.77	75.09	113.42	10.43	0.16											
9.53	TO	9.55	1		105.60	49	574.93			574.93	45.99	18.77	23.96	2.61	0.04											
9.60	TO	9.67	1		369.60	68	2792.53			2792.53	223.40	65.71	116.36	9.13	0.14											
9.67	TO	9.78	1		580.80	57	3678.40			3678.40	294.27	103.25	153.27	14.34	0.22											
9.78	TO	10.84	1		5596.80	40	24874.67			24874.67	1989.97	994.99	1036.44	138.19	2.12											
10.90	TO	12.33	1		7550.40	40	33557.33			33557.33	2684.59	1342.29	1398.22	186.43	2.86											
RAMP A																										
0.03	TO	0.04	3		52.80	55	322.67			322.67	25.81	4.69	13.44	0.65												
0.04	TO	0.17	3		686.40	27	2059.20			2059.20	164.74	61.01	85.80	8.47												
0.17	TO	0.24	2		369.60	25	1026.67			1026.67	82.13	65.71	42.78	9.13												
0.27	TO	0.29	2		105.60	27	316.80			316.80	25.34	18.77	13.20	2.61												
0.29	TO	0.46	2		897.60	33	3291.20			3291.20	263.30	159.57	137.13	22.16												
0.46	TO	0.60	2		739.20	15	1190.93			1190.93	95.27	131.41	49.62	18.25												
RAMP B																										
0.14	TO	0.27	2		686.40	24.00	1830.40			1830.40	146.43	122.03	76.27	16.95												
0.27	TO	0.38	3		580.80	30.00	1936.00			1936.00	154.88	51.63	80.67	7.17												
0.38	TO	0.41	3		158.40	28.00	492.80			492.80	39.42	14.08	20.53	1.96												
								SUBTOTALS	0.00	81722.67	6537.81	3266.56	3405.11	453.69	5.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
								TOTALS CARRIED TO GENERAL SUMMARY	0	81723	6538	3267	3406	454	6	0	0	0	0	0	0	0	0	0	0	0

SLM RANGE			TYPICAL SECTION	SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA		254 PAVEMENT PLANING, ASPHALT CONCRETE (T = 1 1/2")	407 NON-TRACKING TACK COAT @ 0.08 GAL/SY	408 PRIME COAT, AS PER PLAN @ 0.4 GAL/SY	442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN (T = 1 1/2")	617 COMPACTED AGGREGATE, AS PER PLAN (T = 2")	618 RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)											
					FT	FT	SY	SY		SY	GAL	GAL	CY	CY	MILE												
RAMP B SPUR																										
0.00	TO	0.04	2		211.20	27.00	633.60			633.60	50.69	37.55	26.40	5.21												
RAMP C																										
0.00	TO	0.07	2		369.60	12.50	513.33			513.33	41.07	65.71	21.39	9.13												
0.07	TO	0.16	2		475.20	32.50	1716.00			1716.00	137.28	84.48	71.50	11.73												
0.16	TO	0.43	2		1425.60	24.00	3801.60			3801.60	304.13	253.44	158.40	35.20												
RAMP D																										
0.16	TO	0.34	2		950.40	24.00	2534.40			2534.40	202.75	168.96	105.60	23.47												
0.34	TO	0.36	3		105.60	24.00	281.60			281.60	22.53	9.39	11.73	1.30												
0.36	TO	0.47	2		580.80	22.00	1419.73			1419.73	113.58	103.25	59.16	14.34												
RAMP E																										
0.04	TO	0.22	2		950.40	24.00	2534.40			2534.40	202.75	168.96	105.60	23.47												
0.22	TO	0.52	2		1584.00	20.00	3520.00			3520.00	281.60	281.60	146.67	39.11												
								SUBTOTALS	0.00	16954.67	1356.37	1173.33	706.44	162.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
								TOTALS CARRIED TO GENERAL SUMMARY	0	16955	1357	1174	707	163	0	0	0	0	0	0	0	0	0	0	0	0

CALCULATED MJP
CHECKED PD

PAVEMENT CALCULATIONS

TRU-80-08.56

LOCATION									621	621	621		621	REMARKS
COUNTY	ROUTE	SECTION (S.L.M.)							RPM (WHITE)	RPM (YELLOW/RED)	RPM (WHITE/RED)		RAISED PAVEMENT MARKER REMOVED	
		FROM	TO						EACH	EACH	EACH		EACH	
TRU	80 EB	8.60	12.33						165				132	
TRU	80 WB	8.60	12.33						165				132	
TRU	RAMP A	0.03	0.60							21	9		24	
TRU	RAMP B	0.14	0.41							23	25		38	
TRU	RAMP B SPUR	0.00	0.04							2	3		4	
TRU	RAMP C	0.00	0.43							24	27		41	
TRU	RAMP D	0.16	0.47							19	8		22	
TRU	RAMP E	0.04	0.52							13	16		23	
SUBTOTALS									330	102	88			
TOTALS CARRIED TO GENERAL SUMMARY										520			416	

CALCULATED MJP
CHECKED PD

RAISED PAVEMENT MARKER SUBSUMMARY

TRU-80-08.56

GENERAL SPEC: 640
MATERIAL TYPE: 642

CALCULATED MJP
CHECKED PD

EDGE LINE

CTY	ROUTE	TRUE LOG	FROM	TRUE LOG	TO	WHITE EDGE LINE, 6" TOTAL	WHITE EDGE LINE, 6" HIGHWAY	WHITE EDGE LINE, 6" RAMP	YELLOW EDGE LINE, 6" TOTAL	YELLOW EDGE LINE, 6" HIGHWAY	YELLOW EDGE LINE, 6" RAMP	COMMENTS
TRU	I-80 EB	8.60	BEGIN PROJECT	12.33	END PROJECT	4.45	3.73	0.72	4.45	3.73	0.72	
TRU	I-80 WB	8.60	BEGIN PROJECT	12.33	END PROJECT	4.34	3.73	0.61	4.34	3.73	0.61	
TOTAL						8.79	7.46	1.33	8.79	7.46	1.33	

LANE LINE

CTY	ROUTE	TRUE LOG	FROM	TRUE LOG	TO	TOTAL MILES	6" LANE LINE DASHED	6" LANE LINE SOLID	COMMENTS
TRU	I-80 EB	8.60	BEGIN PROJECT	12.33	END PROJECT	3.81			
TRU	I-80 WB	8.60	BEGIN PROJECT	12.33	END PROJECT	3.81			
TOTAL						7.62			

CENTER LINE

CTY	ROUTE	TRUE LOG	FROM	TRUE LOG	TO	TOTAL MILES	EQUIVALENT SOLID LINE	COMMENTS
TOTAL								

AUXILIARY

CTY	ROUTE LOCATION	TRUE LOG	CHANNEL LINE, 8"	CHANNEL LINE, 12"	STOP LINE	CROSS WALK LINES	TRANSVERSE DIAGONAL LINES WHITE	TRANSVERSE DIAGONAL LINES YELLOW	AIR SPEED ZONE MARKING	SYMBOL MARKINGS RxR	SYMBOL MARKINGS SCHOOL 72"	SYMBOL MARKINGS SCHOOL 96"	LANE ARROWS TURN LEFT	LANE ARROWS TURN RIGHT	LANE ARROWS THRU	LANE ARROWS WRONG WAY	LANE ARROWS REDUCT.	WORD ON PVMT ONLY 72"	WORD ON PVMT ONLY 96"	DOTTED LINES, 6"	COMMENTS
			FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	
TRU	I-80 EB @ RAMP C	9.16		600																600	
TRU	I-80 EB @ RAMP D	9.47		600																500	
TRU	I-80 EB @ RAMP E	9.86		1200																500	
TRU	I-80 WB @ RAMP A	9.30		1200																900	
TRU	I-80 WB @ RAMP B	9.69		550																550	
TRU	RAMP B @ US 62/SR 7	0.41		200	18											2					ARROWS PER SCD TC-73.20
TRU	RAMP C @ US 62/SR 7	0.43			32											2					ARROWS PER SCD TC-73.20
TOTAL				4350	50											4				3050	

PAVEMENT MARKINGS

TRU-80-08.56

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17TH EDITION, INCLUDING THE 2002 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

846 DATED 4/17/15
856 DATED 10/20/17

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

PROPOSED WORK

TRU-80-0632 (OVER CRAB CREEK)
-REPAIR RUSTED BOLTS AND SEAMS OF CONDUIT
-CLEARING AND GRUBBING 15' AROUND THE STRUCTURE

TRU-80-0742 (UNDER LEWIS-SEIFERT RD)
-SEAL WEARING SURFACE AND APPROACH SLABS WITH GRAVITY FED RESIN
-PATCH ALL UNSOUND AREAS OF THE SUBSTRUCTURE AND SEAL ALL PATCHED AREAS WITH EPOXY-URETHANE
-CLEAN EXISTING STEEL AS PER CMS 514.14
-CLEARING AND GRUBBING 15' AROUND THE STRUCTURE
-PROVIDE NEW, CORRECT STRUCTURE IDENTIFICATION SIGNS

TRU-80-0798 (UNDER BELLWICK RD)
-SEAL WEARING SURFACE AND APPROACH SLABS WITH GRAVITY FED RESIN
-CLEAN EXISTING STEEL AS PER CMS 514.14
-CLEARING AND GRUBBING 15' AROUND THE STRUCTURE
-PROVIDE NEW, CORRECT STRUCTURE IDENTIFICATION SIGNS

TRU-80-0855R (OVER MT EVERETT/NORFOLK SOUTHERN R.R.)
-SEAL WEARING SURFACE AND APPROACH SLABS WITH GRAVITY FED RESIN
-CLEARING AND GRUBBING 15' AROUND THE STRUCTURE

TRU-80-0856L (OVER MT EVERETT RD/NORFOLK SOUTHERN R.R.)
-SEAL WEARING SURFACE AND APPROACH SLABS WITH GRAVITY FED RESIN
-CLEARING AND GRUBBING 15' AROUND THE STRUCTURE

TRU-80-0905 (UNDER DRUMMOND RD)
-PATCH ALL UNSOUND AREAS OF THE SUBSTRUCTURE AND SEAL ALL PATCHED AREAS WITH EPOXY-URETHANE
-CLEAN EXISTING STEEL AS PER CMS 514.14
-CLEARING AND GRUBBING 15' AROUND THE STRUCTURE
-PROVIDE NEW, CORRECT STRUCTURE IDENTIFICATION SIGNS

TRU-80-0941RL (ON RAMP OVER LITTLE YANKEE RUN)
-REMOVE EXISTING ASPHALT CONCRETE OVERLAY AND WATERPROOFING
-INSTALL EXPANSION JOINTS USING POLYMER MODIFIED ASPHALT BINDER
-PLACE NEW WATERPROOFING ASPHALT CONCRETE OVERLAY
-CLEARING AND GRUBBING 15' AROUND THE STRUCTURE

TRU-80-0941L (OVER LITTLE YANKEE RUN)
-REMOVE EXISTING ASPHALT CONCRETE OVERLAY AND WATERPROOFING
-INSTALL EXPANSION JOINTS USING POLYMER MODIFIED ASPHALT BINDER
-PLACE NEW WATERPROOFING ASPHALT CONCRETE OVERLAY
-PATCH ALL UNSOUND AREAS OF THE RAILING AND SEAL ALL PATCHED AREAS WITH EPOXY-URETHANE
-CLEARING AND GRUBBING 15' AROUND THE STRUCTURE

TRU-80-0942R (OVER LITTLE YANKEE RUN)
-REMOVE EXISTING ASPHALT CONCRETE OVERLAY AND WATERPROOFING
-INSTALL EXPANSION JOINTS USING POLYMER MODIFIED ASPHALT BINDER
-PLACE NEW WATERPROOFING ASPHALT CONCRETE OVERLAY
-REPAIR/REPLACE AND PAINT END CROSS FRAMES
-CLEARING AND GRUBBING 15' AROUND THE STRUCTURE

TRU-80-0957R (OVER US 62/SR 7)
-SEAL WEARING SURFACE AND APPROACH SLABS WITH GRAVITY FED RESIN
-CLEARING AND GRUBBING 15' AROUND THE STRUCTURE

TRU-80-0958L (OVER US 62/SR 7)
-SEAL WEARING SURFACE AND APPROACH SLABS WITH GRAVITY FED RESIN
-CLEARING AND GRUBBING 15' AROUND THE STRUCTURE

TRU-80-1026 (UNDER HUBBARD-SHARON RD)
-REMOVE EXISTING ASPHALT CONCRETE OVERLAY AND WATERPROOFING
-INSTALL EXPANSION JOINTS USING POLYMER MODIFIED ASPHALT BINDER
-PLACE NEW WATERPROOFING ASPHALT CONCRETE OVERLAY
-REPAIR SINKHOLE AND STORM PIPE AT FORWARD RIGHT
-CLEAN EXISTING STEEL AS PER CMS 514.14
-CLEARING AND GRUBBING 15' AROUND THE STRUCTURE
-PROVIDE NEW, CORRECT STRUCTURE IDENTIFICATION SIGNS

TRU-80-1050 (UNDER ABANDONED R.R.)
-REMOVE EXISTING ABANDONED STRUCTURE, INCLUDING BRIDGE DECK, STEEL GIRDERS, STEEL BEAMS, CROSS FRAMES, AND PIERS. BOTH ABUTMENTS ARE TO REMAIN.
-CLEARING AND GRUBBING 15' AROUND THE STRUCTURE
-REMOVE EXISTING STRUCTURE IDENTIFICATION SIGNS

TRU-80-1084R (OVER LITTLE YANKEE RUN/NORFOLK SOUTHERN R.R.)
-REMOVE EXISTING ASPHALT CONCRETE OVERLAY AND WATERPROOFING
-INSTALL EXPANSION JOINTS USING POLYMER MODIFIED ASPHALT BINDER
-PLACE NEW WATERPROOFING ASPHALT CONCRETE OVERLAY
-PATCH ALL UNSOUND AREAS OF THE SUBSTRUCTURE AND SEAL ALL PATCHED AREAS WITH EPOXY-URETHANE
-CLEARING AND GRUBBING 15' AROUND THE STRUCTURE

TRU-80-1085L (OVER LITTLE YANKEE RUN/NORFOLK SOUTHERN R.R.)
-REMOVE EXISTING ASPHALT CONCRETE OVERLAY AND WATERPROOFING
-INSTALL EXPANSION JOINTS USING POLYMER MODIFIED ASPHALT BINDER
-PLACE NEW WATERPROOFING ASPHALT CONCRETE OVERLAY
-PATCH ALL UNSOUND AREAS OF THE SUBSTRUCTURE AND SEAL ALL PATCHED AREAS WITH EPOXY-URETHANE
-CLEARING AND GRUBBING 15' AROUND THE STRUCTURE

TRU-80-1185 (UNDER PRICE-SHAFFER RD)
-REMOVE EXISTING ASPHALT CONCRETE OVERLAY AND WATERPROOFING
-INSTALL EXPANSION JOINTS USING POLYMER MODIFIED ASPHALT BINDER
-PLACE NEW WATERPROOFING ASPHALT CONCRETE OVERLAY
-CLEAN EXISTING STEEL AS PER CMS 514.14
-CLEARING AND GRUBBING 15' AROUND THE STRUCTURE

ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS

ALTHOUGH NO TREES OR STUMPS ARE SPECIFICALLY MARKED FOR REMOVAL WITHIN THE PLANS, A LUMP SUM QUANTITY IS INCLUDED IN THE STRUCTURE GENERAL SUMMARY FOR ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS. SCALPING IS NOT REQUIRED FOR THIS ITEM OF WORK. ALL VEGETATION SHALL BE REMOVED WITHIN 15 FEET (OR TO THE R/W LIMITS, WHICHEVER IS CLOSER) OF THE HEADWALLS, ABUTMENTS AND/OR PIERS.

ALL OTHER PROVISIONS AS SET FORTH IN THE CMS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS.

STRUCTURE IDENTIFICATION SIGNS

STRUCTURE IDENTIFICATION SIGNS (I-H25b) WILL BE PLACED ON EACH APPROACH OFF THE RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. A QUANTITY OF ONE SIGN PER APPROACH WILL BE INSTALLED. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND WILL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 7.5' IN LENGTH.

INSTALL SIGNS FOR THE FOLLOWING STRUCTURES:

TRU-80-0742 (2 APPROACH, CURRENTLY NO SIGNS)
TRU-80-0798 (2 APPROACH)
TRU-80-0905 (2 APPROACH, CURRENTLY NO SIGNS)
TRU-80-1026 (2 APPROACH)

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:
ITEM 630 - GROUND MOUNTED SUPPORT, NO. 2 POST, 7.5 FT
ITEM 630 - SIGN, FLAT SHEET, 730.20, 1 SQ FT
ITEM 630 - REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, 1 EACH
ITEM 630 - REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, 1 EACH

CORRECTING BRIDGE IDENTIFICATION SIGN NUMBERS:

SOME OF THE EXISTING BRIDGE NUMBER SIGNS HAVE INCORRECT BRIDGE NUMBERS ON THEM. THE FOLLOWING BRIDGE NUMBERS ARE THE CORRECT ONES AND WILL BE USED ON THE NEW BRIDGE IDENTIFICATIONS SIGNS.

STRUCTURE TRU-80-0798 (SFN:7804113) THE EXISTING SIGN SHOWS 0799. THE CORRECT BRIDGE IDENTIFICATION NUMBER IS 0798.

STRUCTURE TRU-80-1026 (SFN:7804385) THE EXISTING SIGN SHOWS 1027. THE CORRECT BRIDGE IDENTIFICATION NUMBER IS 1027.

POLYMER MODIFIED ASPHALT JOINT

THIS WORK ITEM SHALL CONSIST OF PLACING NEW MODIFIED ASPHALT JOINTS AT VARIOUS STRUCTURES. THE JOINT SHALL BE 20 INCHES WIDE BY 3 INCHES IN DEPTH. ALL OTHER PROVISIONS OF WORK SHALL FOLLOW SUPPLEMENTAL SPECIFICATION 846.

PAVEMENT MARKINGS

THIS WORK WILL CONSIST OF REPLACING THE EXISITNG PAVEMENT MARKINGS THAT ARE REMOVED DURING THE SURFACE PREPARTION OF ITEM 512, TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN AND THE REMOVAL & REPLACMENT OF STRUCTURE OVERLAY. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE ESTIMATED QUANTITIES SHEET:

TRU-80-0742
ITEM 642, CENTER LINE, 0.12 MI, TYPE 1

TRU-80-0798
ITEM 642, CENTER LINE, 0.07 MI, TYPE 1
ITEM 642, EDGE LINE, 6", 0.14 MI, TYPE 1

TRU-80-0855R
ITEM 642, LANE LINE, 6", 0.06 MI, TYPE 1
ITEM 642, EDGE LINE, 6", 0.12 MI, TYPE 1

TRU-80-0856L
ITEM 642, LANE LINE, 6", 0.06 MI, TYPE 1
ITEM 642, EDGE LINE, 6", 0.12 MI, TYPE 1

TRU-80-0957R
ITEM 642, LANE LINE, 6", 0.06 MI, TYPE 1
ITEM 642, EDGE LINE, 6", 0.12 MI, TYPE 1
ITEM 642, CHANNELIZING LINE, 12", 350 FT, TYPE 1
ITEM 642, DOTTED LINE, 6", 125 FT, TYPE 1

TRU-80-0958L
ITEM 642, LANE LINE, 6", 0.06 MI, TYPE 1
ITEM 642, EDGE LINE, 6", 0.12 MI, TYPE 1
ITEM 642, CHANNELIZING LINE, 12", 360 FT, TYPE 1
ITEM 642, DOTTED LINE, 6", 120 FT, TYPE 1

TRU-80-1026
ITEM 642, CENTER LINE, 0.05 MI, TYPE 1
ITEM 642, EDGE LINE, 6", 0.10 MI, TYPE 1

DESIGN AGENCY
ODOT - DISTRICT 4
CAPITAL PLANNING

DESIGNED MJP | DRAWN MJP | REVIEWED PD | DATE 8/24/20
CHECKED PD | REVISED MJP | STRUCTURE FILE NUMBER

STRUCTURE GENERAL NOTES

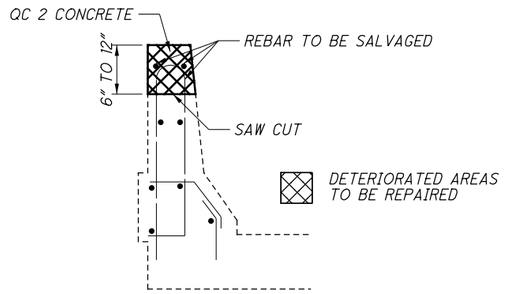
TRU-80
VARIOUS STRUCTURES

TRU-80-08.56
PID No. 96519

ITEM 511 - CONCRETE MISC.: PARAPET REPAIR (TRU-80-0941L)

THIS ITEM WILL BE USED TO REPAIR DAMAGED PARAPETS OF STRUCTURE TRU-80-0941L

SAWCUT AND REMOVE DAMAGED/SPALLED AREAS OF THE EXISTING PARAPETS TO A MINIMUM DEPTH OF 6" AND A MAXIMUM DEPTH OF 12" OR AS DIRECTED BY THE ENGINEER. CARE SHALL BE TAKEN WHEN REMOVING SPALLED CONCRETE TO SALVAGE EXISTING REBAR. QC 2 CONCRETE WILL BE USED TO REPAIR THE DAMAGED PARAPETS. THE REMOVAL OF CONCRETE, PREPARATION OF THE SURFACES, FORMS, AND QC 2 CONCRETE WILL BE INCIDENTAL TO THIS ITEM. PAYMENT WILL BE MADE AT THE CONTRACT PRICE PER FOOT FOR ITEM 511, CONCRETE MISC.: PARAPET REPAIR.



IN THE EVENT THAT UNSALVAGEABLE REBAR IS ENCOUNTERED, A QUANTITY OF ITEM 509 - EPOXY COATED REINFORCING STEEL, 50 LB HAS BEEN PROVIDED TO BE USED AS DIRECTED BY THE ENGINEER.

EROSION REPAIR

THIS WORK WILL CONSIST OF REPAIRING THE SINKHOLE AND UNDERLYING STORM PIPE AT THE FOLLOWING STRUCTURE:

TRU-80-1026 (FORWARD RIGHT)

ITEM 203, EXCAVATION	3 CY
ITEM 203, BORROW	3 CY
ITEM 611, 15" CONDUIT, TYPE B	10 FT

ALL LABOR, MATERIALS, EQUIPMENT, MASONRY COLLARS, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM WILL BE INCLUDED FOR PAYMENT UNDER ITEM 611 - 15" CONDUIT, TYPE B

SPECIAL - STRUCTURES: STRUCTURAL STEEL CLEANING

THIS WORK WILL CONSIST OF CLEANING THE BEAMS/GIRDERS AND BEARINGS OF THE FOLLOWING STRUCTURES:

TRU-80-0742
TRU-80-0798
TRU-80-0905
TRU-80-1026
TRU-80-1185

THE CONTRACTOR SHALL FOLLOW ALL THE REQUIREMENTS OF "WATER QUALITY PROTECTION", "ENVIRONMENTAL COMMITMENTS", AND "DEBRIS REMOVAL AND DISPOSAL" ON SHEET 28. CLEANING OF THE STEEL BEAMS WILL BE PAID FOR AT THE LUMP SUM BID FOR SPECIAL, STRUCTURE MISC.: STRUCTURAL STEEL CLEANING. THIS PRICE WILL INCLUDE THE COST FOR LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

ITEM 202 - WEARING COURSE REMOVED, AS PER PLAN

REMOVE ALL OF THE ASPHALT CONCRETE ON STRUCTURES THAT REQUIRE REMOVAL OF THE EXISTING ASPHALT CONCRETE. MILLING OR OTHER MECHANICAL METHOD OF ASPHALT DECK REMOVAL MAY BE PERFORMED TO WITHIN ½"± OF THE TOP OF THE EXISTING CONCRETE STRUCTURE. THE LAST ½"± OF ASPHALT CONCRETE TO BE REMOVED AND THE WATERPROOFING WILL BE REMOVED USING A NONDESTRUCTIVE METHOD SUCH AS HAND SCRAPING. THE CONTRACTOR WILL USE CAUTION IN REMOVING THE REMAINING ASPHALT AND WATERPROOFING TO ENSURE NO DAMAGE OCCURS TO THE EXISTING STRUCTURE OR MICRO-SILICA OVERLAY. ANY DAMAGE TO THE STRUCTURES WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

PAYMENT FOR THIS ITEM WILL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND ANY INCIDENTALS REQUIRED TO PERFORM THIS WORK. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER SQUARE YARD FOR ITEM 202, WEARING COURSE REMOVED, AS PER PLAN.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

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 THE 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.

ITEM 513 - STRUCTURAL STEEL, MISC.: REPLACEMENT OF DAMAGED CROSSFRAMES

THIS WORK CONSISTS OF REPLACING DAMAGED CROSSFRAMES THAT ARE BENT OR HAVE SECTION LOSS. THIS ITEM WILL INCLUDE SUPPLYING NEW CROSSFRAMES AND WELDING THEM BACK TO THE ORIGINAL POSITIONS OF THE CROSSFRAMES THAT ARE BEING REPLACED. AFTER REMOVAL, ALL WELDS WILL BE GROUND SMOOTH IN PREPARATION OF WELDING THE NEW CROSSFRAMES IN PLACE. ALL CROSSFRAMES TO BE REPLACED WILL BE FIELD MEASURED TO VERIFY SIZE AND LENGTHS PRIOR TO ORDERING MATERIAL. THE NEW CROSSFRAMES WILL BE WELDED TO THE GIRDERS OR BEAMS ON BOTH SIDES OF THE VERTICAL LEG AND ON THE TOP SIDE OF THE HORIZONTAL LEG. THE ANGLE WILL BE WELDED USING A¼" CONTINUOUS FILLET WELD. STEEL MEMBERS TO BE FABRICATED UNDER THIS ITEM WILL NOT REQUIRE SHOP DRAWINGS PRIOR TO FABRICATION. AISC CERTIFICATION IS NOT REQUIRED. THE CONTRACTOR WILL TAKE THE NECESSARY FIELD MEASUREMENTS TO VERIFY MEASUREMENTS BEFORE ORDERING MATERIALS. THE ENGINEER WILL HAVE THE AUTHORITY AND THE RESPONSIBILITY FOR ENSURING THAT THE STEEL IS ACCEPTABLE. AFTER FABRICATION THE PAY WEIGHTS SHALL BE COMPUTED IN COMPLIANCE WITH ITEM 513 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS AND SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.

ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM EXCEPT FOR PAINT WILL BE INCLUDED FOR PAYMENT UNDER ITEM 513 - STRUCTURAL STEEL MISC.: REPLACEMENT OF DAMAGED CROSSFRAMES.

SPECIAL - STRUCTURES: REPAIR OF DETERIORATED SURFACES OF THE STEEL PIPE

THE INTERIOR SURFACE OF THE STEEL PIPE SHALL BE SOLVENT CLEANED ACCORDING TO THE STEEL STRUCTURES PAINT COUNCIL SPECIFICATIONS, SSPC-SP1 TO REMOVE ALL SALTS, OIL AND GREASE FROM THE SURFACE. THE SURFACE SHALL THEN BE PREPARED ACCORDING TO SSPC-SP2, HAND TOOL CLEANING TO REMOVE ANY LOOSE SCALE AND RUST. THE SURFACE OF THE STEEL PIPE SHALL BE PREPARED AS OUTLINED ABOVE BEFORE BEGINNING ANY PAINTING OPERATIONS. THE ENGINEER SHALL DESIGNATE THE AREAS OF THE PIPE TO BE PAINTED. THE INTENT IS NOT TO PAINT THE ENTIRE TOP TWO THIRDS OF THE STEEL PIPE, BUT ONLY THOSE AREAS EXHIBITING SIGNIFICANT LOSS OF THE GALVANIZED COATING.

A LAYER OF INORGANIC ZINC RICH PRIMER SHALL BE APPLIED FIRST, FOLLOWED BY A ZINC RICH PAINT WITH A MINIMUM APPLICATION OF 4 MILS. THE PAINT AND PRIMER SHALL BE APPLIED PER THE MANUFACTURERS SPECIFICATIONS. THIS OPERATIONS SHALL FOLLOW WITHIN 24 HOURS OF THE SURFACE PREPARATION. AN ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. PAYMENT SHALL BE MADE FOR ALL MATERIALS, LABOR AND EQUIP MENT NECESSARY TO COMPLETE THIS ITEM OF WORK AND SHALL BE PAID FOR IN THE UNIT PRICE BID PER SQUARE FOOT FOR ITEM SPECIAL-REPAIR OF DETERIORATED SURFACES OF THE STEEL CIRCULAR PIPE.

ITEM 202, STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN (TRU-80-1050)

REMOVE STRUCTURE TRU-80-1050 SUPERSTRUCTURE AND SUBSTRUCTURE INCLUDING THE MEDIAN PIERS, STEEL BEAMS, AND STEEL GIRDERS AS PER CMS 202. DO NOT REMOVE THE ABUTMENTS.

PRIOR TO ANY WORK AT THIS LOCATION, THE CONTRACTOR SHALL SUBMIT A DEMOLITION PLAN FOR REVIEW TO THE PROJECT ENGINEER.

SEEDING AND MULCHING (TRU-80-1050)

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, TOPSOIL, 5.55 CY
659, SEEDING AND MULCHING, 50 SY
659, REPAIR SEEDING AND MULCHING, 3 SY
659, INTER-SEEDING, 3 SY
659, COMMERCIAL FERTILIZER, 0.01 TON
659, LIME, 0.01 AC
659, WATER, 0.14 M. GAL.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

FENCE LENGTHS

THE LENGTHS OF FENCE SHOWN IN THE PLANS ARE HORIZONTAL DIMENSIONS. MEASUREMENTS OF THE FINAL QUANTITIES WILL BE IN ACCORDANCE WITH ITEM 607.

ITEM 607 - FENCE, TYPE 47 (TRU-80-1050)

THIS ITEM SHALL CONSIST OF REMOVING ANY DAMAGED PORTION OF THE EXISTING RIGHT-OF-WAY FENCE CLOSEST TO THE STRUCTURE AND CONNECTING THE FENCE AT THE FORWARD AND REAR SIDE AFTER THE BRIDGE REMOVAL IS COMPLETED.

PAYMENT FOR THIS ITEM INCLUDES ALL COSTS OF MATERIAL, LABOR, EQUIPMENT, AND INCIDENTALS TO COMPLETE THE WORK. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE STRUCTURE ESTIMATED QUANTITIES SHEET:

ITEM 607 - FENCE, TYPE 47 160 FT

STREAM AVOIDANCE

TRU-80-6.32, TRU-80-9.41RL, TRU-80-9.41L, TRU-80-9.42R, TRU-80-10.50, TRU-80-10.84R, TRU-80-10.85L: UNDER NO CIRCUMSTANCES SHALL ANY EQUIPMENT (LIFT, BACKHOE, EARTH MOVING EQUIPMENT, ETC.) AND/OR MATERIALS ENTER THE STREAM(S) AT THE AFOREMENTIONED LOCATIONS. NO FILL MATERIAL (INCLUDING TEMPORARY FILLS) SHALL BE PLACED BELOW THE IDENTIFIED ORDINARY HIGH WATER MARK (OHWM) OF THE STREAM(S). THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT ALL CONSTRUCTION MATERIALS, WASTE MATERIALS, WATER CHEMICALS OR OTHER SUBSTANCES USED TO CONSTRUCT THE PROJECT FROM ENTERING THE STREAM(S).

WETLANDS AVOIDANCE

TRU-80-10.50: NO EXCAVATION, GRADING, OR FILLING OPERATIONS SHALL BE PERFORMED IN THE WETLANDS DELINEATED BEYOND THE PROJECT CONSTRUCTION LIMITS AND DEPICTED IN THE PROJECT PLANS. TO PROTECT AND DELINEATE THE BOUNDARIES OF THE EXISTING RESOURCES, A FILTER FABRIC FENCE AND TEMPORARY CONSTRUCTION FENCE PER SUPPLEMENTAL SPECIFICATION 832, SHALL BE INSTALLED AT THE PROPOSED CONSTRUCTION LIMITS, MAINTAINING A ONE-FOOT BUFFER BETWEEN THE FENCE AND THE WETLAND BOUNDARIES, WHEN PRACTICABLE, PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES, INCLUDING ANY NECESSARY CLEARING AND GRUBBING ACTIVITIES, AND BE MAINTAINED BY THE CONTRACTOR THROUGHOUT PROJECT CONSTRUCTION. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR STORE EQUIPMENT AND/OR MATERIALS IN ANY WETLANDS, ETC. ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS SECTION 107.10 (PROTECTION AND RESTORATION OF PROPERTY) PROHIBIT THE CONTRACTOR FROM CREATING STAGING AREAS NEAR STREAMS AND/OR WETLANDS.

WETLANDS AVOIDANCE

TRU-80-10.50: NO EXCAVATION, GRADING, OR FILLING OPERATIONS SHALL BE PERFORMED IN THE WETLANDS DELINEATED BEYOND THE PROJECT CONSTRUCTION LIMITS AND DEPICTED IN THE PROJECT PLANS. TO PROTECT AND DELINEATE THE BOUNDARIES OF THE EXISTING RESOURCES, A FILTER FABRIC FENCE AND TEMPORARY CONSTRUCTION FENCE PER SUPPLEMENTAL SPECIFICATION 832, SHALL BE INSTALLED AT THE PROPOSED CONSTRUCTION LIMITS, MAINTAINING A ONE-FOOT BUFFER BETWEEN THE FENCE AND THE WETLAND BOUNDARIES, WHEN PRACTICABLE, PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES, INCLUDING ANY NECESSARY CLEARING AND GRUBBING ACTIVITIES, AND BE MAINTAINED BY THE CONTRACTOR THROUGHOUT PROJECT CONSTRUCTION. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR STORE EQUIPMENT AND/OR MATERIALS IN ANY WETLANDS, ETC. ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS SECTION 107.10 (PROTECTION AND RESTORATION OF PROPERTY) PROHIBIT THE CONTRACTOR FROM CREATING STAGING AREAS NEAR STREAMS AND/OR WETLANDS.

DESIGN AGENCY
ODOT - DISTRICT 4
CAPITAL PLANNING

DESIGNED MJP | DRAWN MJP | REVIEWED PD | DATE 8/24/20
CHECKED PD | REVISED MJP | STRUCTURE FILE NUMBER

STRUCTURE GENERAL NOTES
TRU-80
VARIOUS STRUCTURES

TRU-80-08.56
PID No. 96519

ASBESTOS NOTIFICATION (TRU-80-1050 STRUCTURE)

A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST INSPECTED THE BRIDGE STRUCTURE SCHEDULED FOR DEMOLITION AND/OR REHABILITATION;

THE INSPECTION DETERMINED THAT APPROXIMATELY 50 SQUARE FEET OF ASPHALT PARAPET EXPANSION PADS CONTAINS ASBESTOS. THE ASBESTOS CONTAINING MATERIAL SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR SHALL ENSURE THAT THE ABATEMENT, TRANSPORT, AND DISPOSAL OF ASBESTOS CONTAINING MATERIAL IS CONDUCTED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS. THE CONTRACTOR SHALL ENSURE THAT ALL DOCUMENTATION RELATED TO THE ABATEMENT, TRANSPORT, AND DISPOSAL OF ASBESTOS CONTAINING MATERIALS IS SUBMITTED TO THE PROJECT ENGINEER FOR RECORD KEEPING WITHIN 2 WEEKS OF COMPLETION.

THE DEPARTMENT HAS PROVIDED A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM (PARTIALLY COMPLETED) AND THE ASBESTOS INSPECTION REPORT IN THE REFERENCE FILES FOR THIS PROJECT. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO THE OEPA AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. ONLINE SUBMISSION IS AVAILABLE AT http://www.epa.ohio.gov/asbestos AND IS ENCOURAGED OR, THE CONTRACTOR SHALL SUBMIT IT TO ONE OF THE ADDRESSES BELOW

ASBESTOS PROGRAM
OHIO EPA, DAPC
P.O. BOX 1049
COLUMBUS, OH 43216-1049

OR

ASBESTOS PROGRAM
OHIO EPA, DAPC
50 W. TOWN ST., SUITE 700
COLUMBUS, OH 43215

THE FORM SHALL INCLUDE:
1. THE CONTRACTORS NAME AND ADDRESS
2. THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE STRUCTURE DEMOLITION AND/OR RENOVATION
3. DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHODS BE USED
4. ALL NECESSARY FEES

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED NOTIFICATION OF DEMOLITION AND RENOVATION FORM TO THE PROJECT ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIALS NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 STRUCTURE REMOVED, OVER 20 FOOT SPAN

THE CONTRACTOR SHALL FURNISH ALL THE LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PROPERLY ABATE, TRANSPORT, AND DISPOSE OF ASBESTOS CONTAINING MATERIALS IN A LANDFILL LICENSED BY THE LOCAL HEALTH DEPARTMENT AND PERMITTED BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY - DIVISION OF AIR POLLUTION CONTROL TO ACCEPT ASBESTOS CONTAINING MATERIAL. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM SPECIAL STRUCTURES, REMOVAL OF ASBESTOS CONTAINING MATERIAL

DESIGN AGENCY
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DESIGNED	DRAWN	REVIEWED	DATE
MJP	MJP	PD	8/24/20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PD	MJP		

STRUCTURE GENERAL NOTES
TRU-80-1050

TRU-80-08.56
PID No. 96519

CALC:	MJP	DATE:	4/29/2020
CHECKED:	PD	DATE:	8/26/2020

ESTIMATED QUANTITIES

BRIDGE NO. / STRUCTURE FILE NO.											ITEM	EXTENSION	UNIT	DESCRIPTION	SEE SHEET
TRU-80-0632 7804059 03/IMS/BR	TRU-80-0742 7804083 02/IMS/BR	TRU-80-0798 7804113 02/IMS/BR	TRU-80-0855R 7804164 02/IMS/BR	TRU-80-0856L 7804156 02/IMS/BR	TRU-80-0905 7804202 02/IMS/BR	TRU-80-0941RL 7804237 02/IMS/BR	TRU-80-0941L 7804261 02/IMS/BR	TRU-80-0942R 7804296 02/IMS/BR							
LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP			201	11001	LS	CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS	1 / 10
											202	11002	LS	STRUCTURE REMOVED, OVER 20 FOOT SPAN	
						302	502	502			202	23501	SY	WEARING COURSE REMOVED, AS PER PLAN	2 /10
											203	40000	CY	BORROW	
						25	40	40			407	13900	GAL	TACK COAT, 702.13	
						19	30	30			407	20000	GAL	NON-TRACKING TACK COAT	
						13	21	21			442	10301	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN	4
							50				509	10000	LB	EPOXY COATED REINFORCING STEEL	
							10				511	81100	FT	CONCRETE, MISC.: PARAPET REPAIR	2 / 10
	35				50		2				512	10100	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
	1142	1129	2167	2468							512	73500	SY	TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN	
								170			513	90000	LB	STRUCTURAL STEEL, MISC.: REPLACEMENT OF DAMAGED CROSSFRAMES	2 / 10
	200				300						519	11101	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	2 / 10
						4	6	6			519	12304	SY	PATCHING CONCRETE BRIDGE DECK - TYPE C	
	LUMP	LUMP			LUMP						SPECIAL	53000200		STRUCTURES, MISC.: CLEANING OF BRIDGE JOINTS	9 / 10
	LUMP	LUMP			LUMP						SPECIAL	53000200		STRUCTURES, MISC.: CLEANING OF BRIDGE SEATS	9 / 10
	LUMP	LUMP			LUMP						SPECIAL	53000200		STRUCTURES, MISC.: CLEANING OF DRAINAGE SYSTEMS	9 / 10
	LUMP	LUMP			LUMP						SPECIAL	53000200		STRUCTURES, MISC: STRUCTURAL STEEL CLEANING	2 / 10
250											SPECIAL	53000600	SF	STRUCTURES: REPAIR OF DETERIORATED SURFACES OF THE STEEL PIPE	2 / 10
	15	15			15						630	02100	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
	2	2			2						630	80100	SF	SIGN, FLAT SHEET	
		2									630	84900	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
		2									630	86002	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
		0.14	0.12	0.12							642	00104	MILE	EDGE LINE, 6", TYPE 1	
			0.06	0.06							642	00204	MILE	LANE LINE, 6", TYPE 1	
	0.12	0.07									642	00300	MILE	CENTER LINE, TYPE 1	
											659	00300	CY	TOPSOIL	
											659	10000	SY	SEEDING AND MULCHING	
											659	14000	SY	REPAIR SEEDING AND MULCHING	
											659	15000	SY	INTER-SEEDING	
											659	20000	TON	COMMERCIAL FERTILIZER	
											659	31000	ACRE	LIME	
											659	35000	MGAL	WATER	
						23	30	30			846	00110	CF	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM	
						13	21	21			856	10000	CY	BRIDGE DECK WATERPROOFING ASPHALT CONCRETE	

DESIGN AGENCY
ODOT DISTRICT 4
CAPTIAL PLANNING

DESIGNED	DRAWN	REVIEWED	DATE
MJP	MJP	PD	8/24/20
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PD	MJP	00000	

STRUCTURE ESTIMATED QUANTITIES
TRU-80
VARIOUS STRUCTURES

TRU-80-08.56
PID No. 96519

CALC:	MJP	DATE:	4/29/2020
CHECKED:	PD	DATE:	8/26/2020

ESTIMATED QUANTITIES

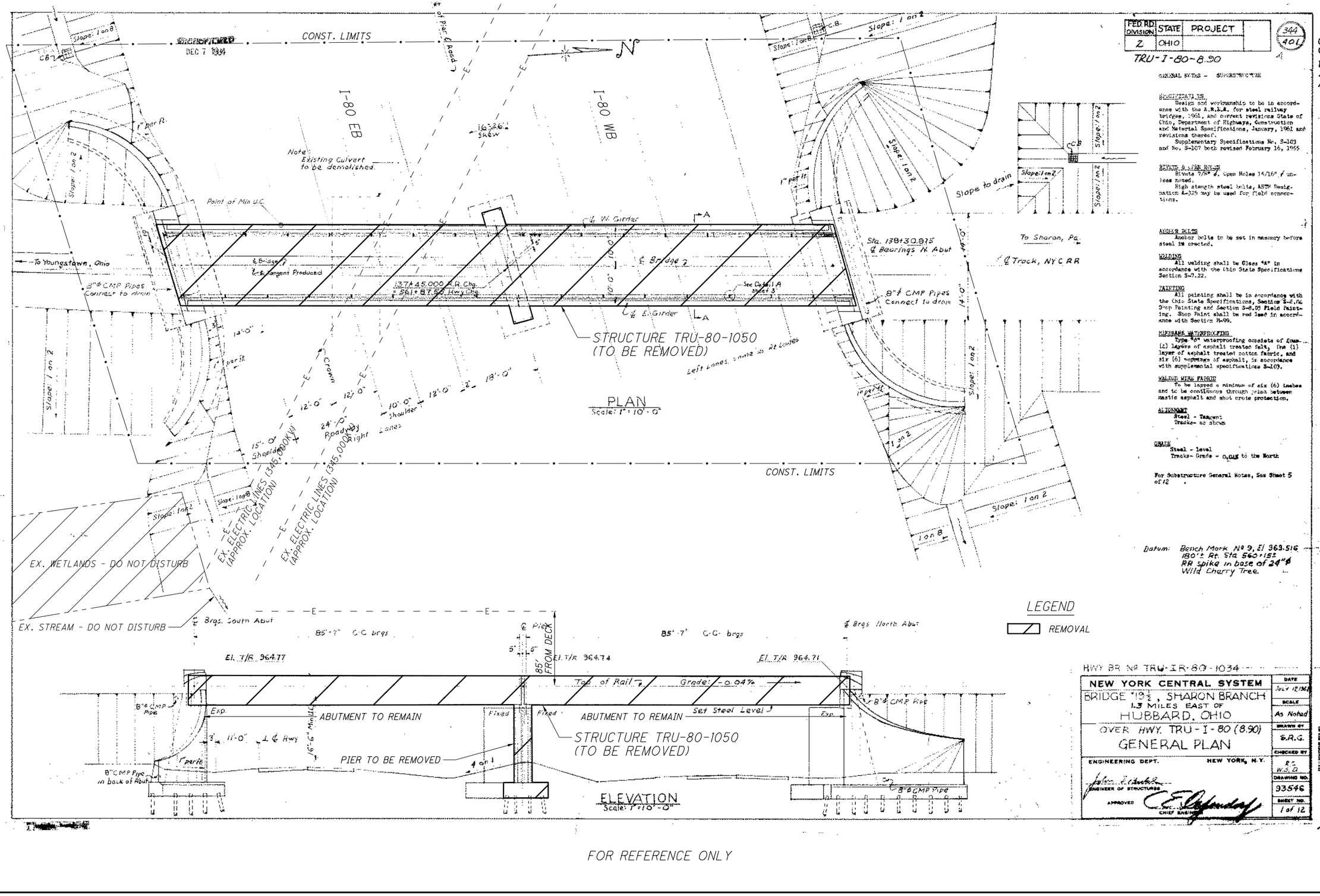
BRIDGE NO. / STRUCTURE FILE NO.											ITEM	EXTENSION	UNIT	DESCRIPTION	SEE SHEET
TRU-80-0957R 7804350 02/IMS/BR	TRU-80-0958L 7804326 02/IMS/BR	TRU-80-1026 7804385 02/IMS/BR	TRU-80-1050 7804415 04/IMS/BR	TRU-80-1084R 7804504 02/IMS/BR	TRU-80-1085L 7804474 02/IMS/BR	TRU-80-1185 7804539 02/IMS/BR									
LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP					201	11001	LS	CLEARING AND GRUBBING, AS PER PLAN, AROUND BRIDGES/STRUCTURES/CULVERTS	1 / 10
			LUMP								202	11002	LS	STRUCTURE REMOVED, OVER 20 FOOT SPAN	
		940		1067	1067	752					202	23501	SY	WEARING COURSE REMOVED, AS PER PLAN	2 / 10
		3									203	10000	CY	EXCAVATION	
		3									203	40000	CY	BORROW	
		75		86	86	60					407	13900	GAL	TACK COAT, 702.13	
		57		64	64	45					407	20000	GAL	NON-TRACKING TACK COAT	
		40		44	44	32					442	10301	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN	4
				25	25						512	10100	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
2597	2594										512	73500	SY	TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN	
											513	90000	LB	STRUCTURAL STEEL, MISC.: REPLACEMENT OF DAMAGED CROSSFRAMES	2 / 10
				100	100						519	11101	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	2 / 10
		10		11	11	8					519	12304	SY	PATCHING CONCRETE BRIDGE DECK - TYPE C	
		LUMP				LUMP					SPECIAL	53000200		STRUCTURES, MISC.: CLEANING OF BRIDGE JOINTS	9 / 10
		LUMP				LUMP					SPECIAL	53000200		STRUCTURES, MISC.: CLEANING OF BRIDGE SEATS	9 / 10
		LUMP				LUMP					SPECIAL	53000200		STRUCTURES, MISC.: CLEANING OF DRAINAGE SYSTEMS	9 / 10
		LUMP				LUMP					SPECIAL	53000200		STRUCTURES, MISC: STRUCTURAL STEEL CLEANING	2 / 10
											SPECIAL	53000600	SF	STRUCTURES: REPAIR OF DETERIORATED SURFACES OF THE STEEL PIPE	2 / 10
			160								607	15000	FT	FENCE, TYPE 47	
		10									611	05900	FT	15" CONDUIT, TYPE B	
		15									630	02100	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
		2									630	80100	SF	SIGN, FLAT SHEET	
		2									630	84900	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
		2									630	86002	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
0.12	0.12	0.10									642	00104	MILE	EDGE LINE, 6", TYPE 1	
0.06	0.06										642	00204	MILE	LANE LINE, 6", TYPE 1	
		0.05									642	00300	MILE	CENTER LINE, TYPE 1	
350	360										642	00404	FT	CHANNELIZING LINE, 12", TYPE 1	
125	120										642	00500	FT	STOP LINE, TYPE 1	
			5.5								659	00300	CY	TOPSOIL	
			50								659	10000	SY	SEEDING AND MULCHING	
			3								659	14000	SY	REPAIR SEEDING AND MULCHING	
			3								659	15000	SY	INTER-SEEDING	
			0.01								659	20000	TON	COMMERCIAL FERTILIZER	
			0.01								659	31000	ACRE	LIME	
			0.14								659	35000	MGAL	WATER	
		26		25	25	20					846	00110	CF	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM	
		40		44	44	32					856	10000	CY	BRIDGE DECK WATERPROOFING ASPHALT CONCRETE	
			50								SPECIAL	53000600	SF	STRUCTURES, REMOVAL OF ASBESTOS CONTAINING MATERIAL	

DESIGN AGENCY
ODOT DISTRICT 4
CAPTIAL PLANNING

DESIGNED	DRAWN	REVIEWED	DATE
MJP	MJP	PD	8/24/20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PD	MJP	00000	

STRUCTURE ESTIMATED QUANTITIES
TRU-80
VARIOUS STRUCTURES

TRU-80-08.56
PID No. 96519



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

344
401

TRU-I-80-8.90

GENERAL NOTES - SUPERSTRUCTURE

SPECIFICATIONS
Design and workmanship to be in accordance with the A.R.E.A. for steel railway bridges, 1961, and current revisions State of Ohio, Department of Highways, Construction and Material Specifications, January, 1961 and revisions thereof.
Supplementary Specifications No. S-103 and No. S-107 both revised February 16, 1955

RIVETS & HIGH STRENGTH BOLTS
Rivets 7/8" ϕ. Open Holes 14/16" ϕ unless noted.
High strength steel bolts, ASTM Designation A-325 may be used for field connections.

ANCHOR BOLTS
Anchor bolts to be set in masonry before steel is erected.

WELDING
All welding shall be Class "A" in accordance with the Ohio State Specifications Section S-7.22.

PAINTING
All painting shall be in accordance with the Ohio State Specifications, Sections S-8.04 Shop Painting and Section S-8.05 Field Painting. Shop Paint shall be red lead in accordance with Section M-99.

MEMBRANE WATERPROOFING
Type "A" waterproofing consists of four (4) layers of asphalt treated felt, five (5) layer of asphalt treated cotton fabric, and six (6) mopings of asphalt, in accordance with supplemental specifications S-103.

WELDED WIRE FABRIC
To be lapped a minimum of six (6) inches and to be continuous through joint between mastic asphalt and shot crete protection.

ALIGNMENT
Steel - Tangent
Tracks- as shown

GRADE
Steel - level
Tracks- Grade = 0.04% to the North

For Substructure General Notes, See Sheet 5 of 12

Datum: Bench Mark № 9, El 963.516
180'± Rt. Sta 560+15±
RR spike in base of 24"ϕ Wild Cherry Tree.

HWY BR № TRU-I-80-1034

NEW YORK CENTRAL SYSTEM	
BRIDGE 19½, SHARON BRANCH 1.3 MILES EAST OF HUBBARD, OHIO OVER HWY. TRU-I-80 (8.90)	DATE July 1965
GENERAL PLAN	SCALE As Noted
ENGINEERING DEPT. NEW YORK, N.Y.	DRAWN BY S.R.G.
ENGINEER OF STRUCTURES	CHECKED BY R.C. W.S.D.
APPROVED CHIEF ENGINEER	DRAWING NO. 93546
	SHEET NO. 1 of 12

FOR REFERENCE ONLY

DESIGN AGENCY: ODOT DISTRICT 4 CAPTIAL PLANNING
DESIGNED MJP | DRAWN MJP | REVIEWED PD | DATE 8/24/20
CHECKED PD | REVISED MJP | STRUCTURE FILE NUMBER 7804415

STRUCTURE TRU-80-1050 PLAN SHEET (FOR REFERENCE ONLY)
TRU-80-08.56
PID No. 96519
TRU-80-1050
UNDER ABANDONED RAILROAD

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9426R

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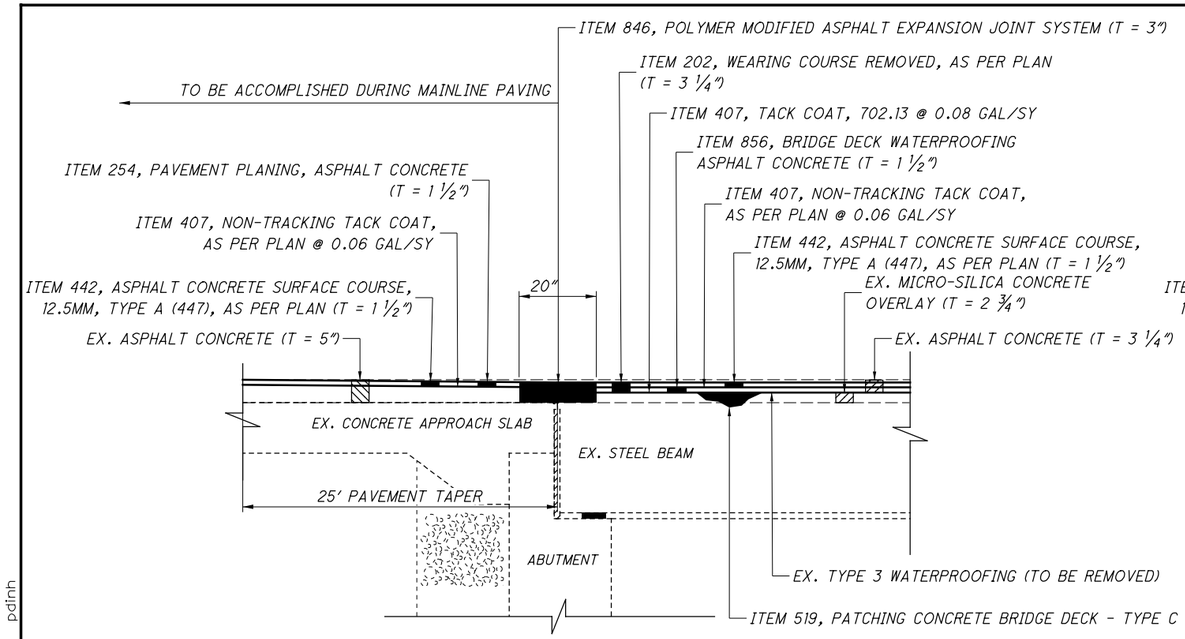
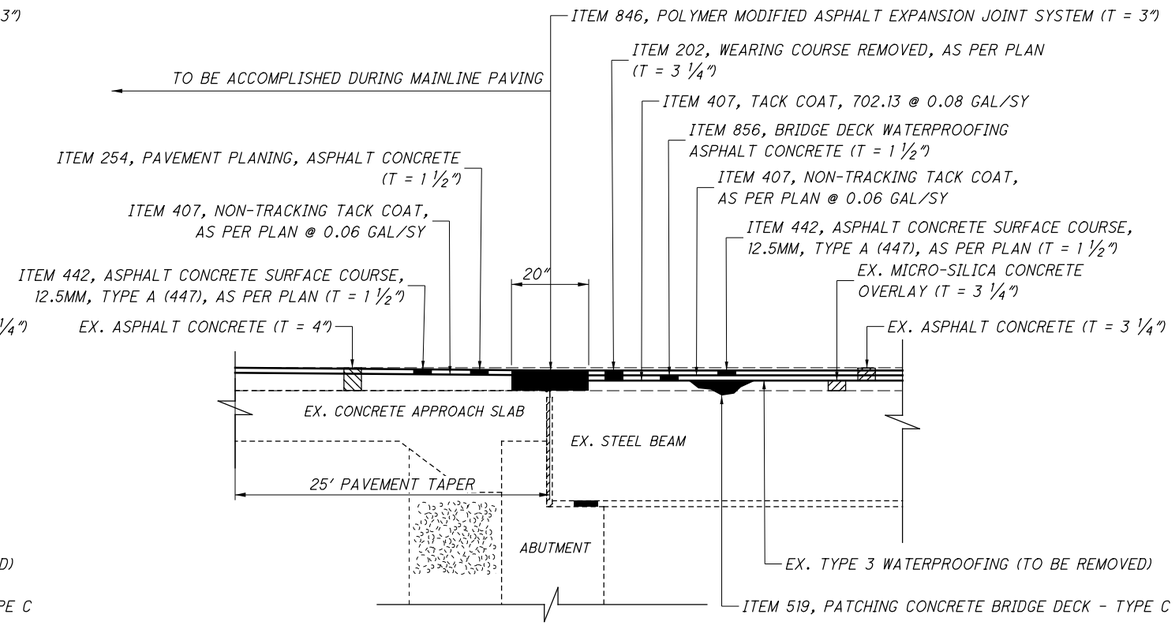


TRU-80-0941RL

APPROACH SHOWN, TRAILING SIMILAR



TRU-80-0941L, TRU-80-0942R, TRU-80-1084R, TRU-80-1085L

APPROACH SHOWN, TRAILING SIMILAR

	BRIDGE DECK												APPROACH SLABS											
					202	407	407	442	512	519	856								512	846					
BRIDGE NUMBER	LENGTH (BRIDGE LIMITS)	BRIDGE WIDTH	DECK AREA		WEARING COURSE REMOVED	TACK COAT, 702.13 @ 0.08 GAL/SY	NON-TRACKING TACK COAT @ 0.06 GAL/SY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN	TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN	PATCHING CONCRETE BRIDGE DECK - TYPE C	BRIDGE DECK WATERPROOFING ASPHALT CONCRETE		LENGTH (APPROACH SLABS)	APPROACH SLAB WIDTH	APPROACH SLAB AREA	APPROACH (FORWARD / REAR)			TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM					
	FT	FT	SQ YD		SY	GAL	GAL	CY	SY	SY	CY		FT	FT	SQ YD				SY	CF					
TRU-80-0742	317.00	28.00	986.22						986.22				25.00	28.00	77.78	FORW			77.78						
													25.00	28.00	77.78	REAR			77.78						
TRU-80-0798	311.00	28.00	967.56						967.56				26.00	28.00	80.89	FORW			80.89						
													26.00	28.00	80.89	REAR			80.89						
TRU-80-0855R	267.00	60.00	1780.00						1780.00				29.00	60.00	193.33	FORW			193.33						
													29.00	60.00	193.33	REAR			193.33						
TRU-80-0856L	289.00	64.00	2055.11						2055.11				29.00	64.00	206.22	FORW			206.22						
													29.00	64.00	206.22	REAR			206.22						
TRU-80-0941RL	109.00	25.00	302.78		302.78	24.22	18.17	12.62		4.00	12.62		25.00	25.00	69.44	FORW				10.42					
													25.00	25.00	69.44	REAR				10.42					
TRU-80-0941L	122.00	37.00	501.56		501.56	40.12	30.09	20.90		6.00	20.90		25.00	37.00	102.78	FORW				15.42					
													25.00	37.00	102.78	REAR				15.42					
TRU-80-0942R	122.00	37.00	501.56		501.56	40.12	30.09	20.90		6.00	20.90		25.00	37.00	102.78	FORW				15.42					
													25.00	37.00	102.78	REAR				15.42					
			TOTALS		1306	105	79	55	5789	16	55					TOTALS			1117	83					

DESIGN AGENCY
ODOT DISTRICT 4
CAPTIAL PLANNING

DESIGNED	DRAWN	REVIEWED	DATE
MJP	MJP	PD	8/24/20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PD	MJP		

STRUCTURE DETAILS
TRU-80
VARIOUS STRUCTURES

TRU-80-08.56
PID No. 96519

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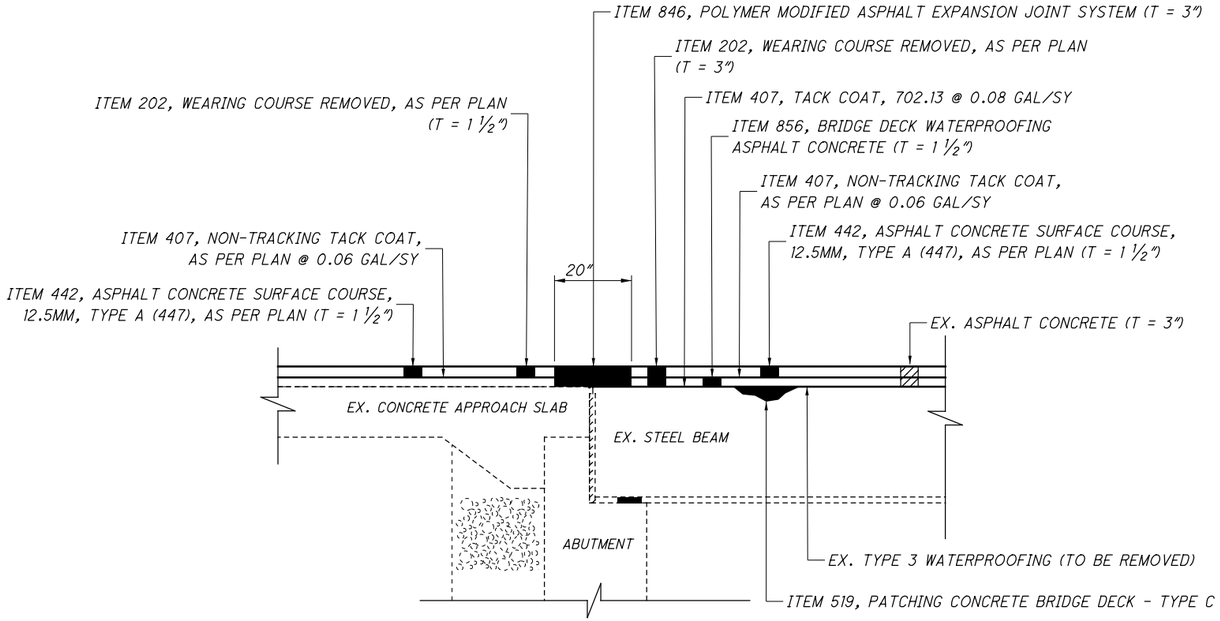
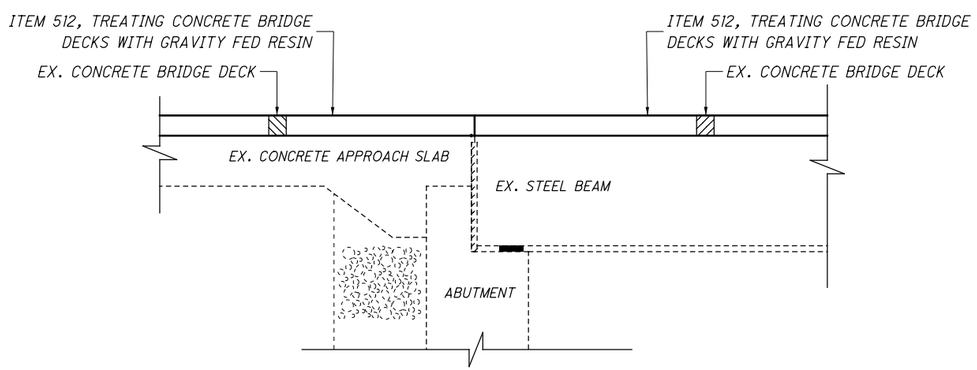


TRU-80-1026, TRU-80-1185

APPROACH SHOWN,
TRAILING SIMILAR



TRU-80-0742, TRU-80-0798, TRU-80-0855R, TRU-80-0856L, TRU-80-0957R, TRU-80-0958L

APPROACH SHOWN,
TRAILING SIMILAR

BRIDGE NUMBER	BRIDGE DECK												APPROACH SLABS											
	LENGTH (BRIDGE LIMITS)	BRIDGE WIDTH	DECK AREA		202 WEARING COURSE REMOVED	407 TACK COAT, 702.13 @ 0.08 GAL/SY	407 NON-TRACKING TACK COAT @ 0.06 GAL/SY	442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN	512 TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN	519 PATCHING CONCRETE BRIDGE DECK - TYPE C	856 BRIDGE DECK WATERPROOFING ASPHALT CONCRETE		LENGTH (APPROACH SLABS)	APPROACH SLAB WIDTH	APPROACH SLAB AREA	APPROACH (FORWARD / REAR)		202 WEARING COURSE REMOVED	407 NON-TRACKING TACK COAT @ 0.06 GAL/SY	442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN	512 TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN	846 POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM			
	FT	FT	SQ YD		SY	GAL	GAL	CY	SY	SY	CY		FT	FT	SQ YD			SY	GAL	CY	SY	CF			
TRU-80-0957R	250.00	77.00	2138.89						2138.89				26.00	85.00	245.56	FORW					245.56				
													27.00	71.00	213.00	REAR					213.00				
TRU-80-0958L	250.00	77.00	2138.89						2138.89				26.00	69.00	199.33	FORW					199.33				
													27.00	85.00	255.00	REAR					255.00				
TRU-80-1026	282.00	30.00	940.00		940.00	75.20	56.40	39.17		10.00	39.17		10.00	30.00	33.33	FORW		33.33	2.00	1.39		12.50			
													10.00	30.00	33.33	REAR		33.33	2.00	1.39		12.50			
TRU-80-1084R	320.00	30.00	1066.67		1066.67	85.33	64.00	44.44		11.00	44.44		12.00	30.00	40.00	FORW						12.50			
													10.00	30.00	33.33	REAR						12.50			
TRU-80-1085L	320.00	30.00	1066.67		1066.67	85.33	64.00	44.44		11.00	44.44		25.00	30.00	83.33	FORW						12.50			
													25.00	30.00	83.33	REAR						12.50			
TRU-80-1185	282.00	24.00	752.00		752.00	60.16	45.12	31.33		8.00	31.33		30.00	24.00	80.00	FORW		80.00	4.80	3.33		10.00			
													30.00	24.00	80.00	REAR		80.00	4.80	3.33		10.00			
			TOTALS		3826	307	230	160	4278	40	160					TOTALS		227	14	10	913	96			

DESIGN AGENCY
ODOT DISTRICT 4
CAPTIAL PLANNING

DESIGNED	DRAWN	REVIEWED	DATE
MJP	MJP	PD	8/24/20
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PD	MJP		

STRUCTURE DETAILS
TRU-80
VARIOUS STRUCTURES

TRU-80-08.56
PID No. 96519

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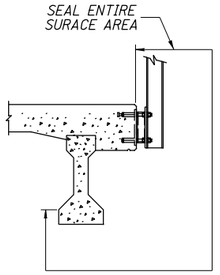
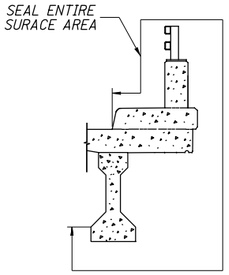
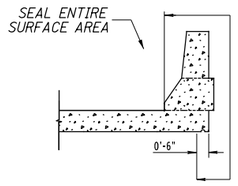


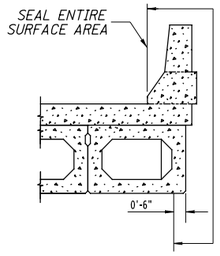
DETAIL A
CONCRETE DECKS WITH
OVER THE SIDE DRAINAGE



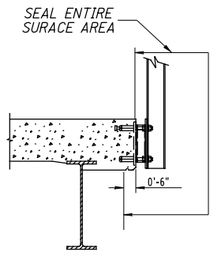
DETAIL B
CONCRETE DECKS WITH CURBS,
SIDEWALKS AND PARAPET



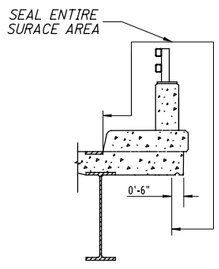
DETAIL C
CONCRETE DECK WITH
DEFLECTOR PARAPET



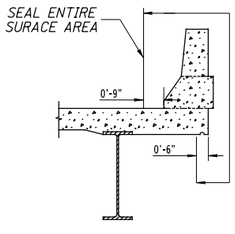
DETAIL D
PRESTRESSED BOX BEAM DECK
WITH DEFLECTOR PARAPET



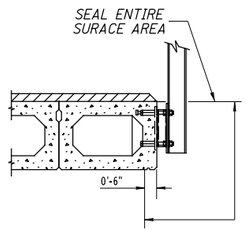
DETAIL E
CONCRETE DECKS WITH
OVER THE SIDE DRAINAGE



DETAIL F
CONCRETE DECKS WITH CURBS,
SIDEWALKS AND PARAPET



DETAIL G
CONCRETE DECK WITH
DEFLECTOR PARAPET



DETAIL H
PRESTRESSED BOX BEAM DECK
WITH OVER THE SIDE DRAINAGE

BRIDGE NUMBER	STRUCTURE TYPE	PROPOSED SEALING	FEDERAL COLOR NUMBER	ESTIMATED QUANTITIES				
				ABUT (SQ YD)	PIER (SQ YD)	SUPER (SQ YD)	GENERAL (SQ YD)	TOTAL (SQ YD)
TRU-80-0742	STEEL BEAM	SEAL ALL PATCHED AREAS OF SUBSTRUCTURE	PER CMS		35			35
TRU-80-0905	STEEL BEAM	SEAL ALL PATCHED AREAS OF SUBSTRUCTURE	PER CMS		50			50
TRU-80-0941L	STEEL BEAM	SEAL ALL PATCHED AREAS OF RAILING	PER CMS			2		2
TRU-80-1084R	STEEL BEAM	SEAL ALL PATCHED AREAS OF SUBSTRUCTURE	PER CMS		25			25
TRU-80-1085L	STEEL BEAM	SEAL ALL PATCHED AREAS OF SUBSTRUCTURE	PER CMS		25			25

NOTES:
- EPOXY-URETHANE SEALER SHALL BE USED UNLESS SHOWN OTHERWISE

DESIGN AGENCY
ODOT DISTRICT 4
CAPTIAL PLANNING

REVIEWED PD DATE 8/24/20 STRUCTURE FILE NUMBER
DRAWN MJP REVISED MJP
DESIGNED MJP CHECKED PD

SEALING DETAILS
TRU-80-0742, TRU-80-0905, TRU-80-0941L,
TRU-80-1084R, TRU-80-1085L

TRU-80-08.56
PID No. 96519

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WATER QUALITY PROTECTION:

THIS PROJECT IS SUBJECT TO THE CONDITIONS OF NPDES PERMIT OHZ000001. THE CONTRACTOR MUST SUBMIT A NOTICE OF INTENT AS A CO- PERMITTEE UNDER THIS PROJECT AND RECEIVE OEPA APPROVAL TO OPERATE UNDER THE PERMIT PRIOR TO UNDERTAKING ITEM 530 SPECIAL STRUCTURES MISC.: CLEANING BRIDGES . CONTRACTOR MUST COMPLETE THE " WORK PLAN FOR BRIDGE CLEANING " FOR EACH BRIDGE IN ACCORDANCE WITH THE NPDES PERMIT.

ENVIRONMENTAL COMMITMENTS

ALL EQUIPMENT AND MATERIALS MUST BE STAGED ABOVE THE ORDINARY HIGH WATER MARK.

NO IN STREAM WORK IS PERMITTED.

NO TEMPORARY FILL IS PERMITTED BELOW THE ORDINARY HIGH WATER MARK.

DEBRIS REMOVAL AND DISPOSAL

CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF DEBRIS IN ACCORDANCE WITH ALL ENVIRONMENTAL RESTRICTIONS AND PERMITS. DISPOSE ALL THE DEBRIS AS A RESULT OF THE BRIDGE CLEANING OPERATIONS IN ACCORDANCE WITH CMS 105.16. AND OAC 3745-27-05. UNDER NO CIRCUMSTANCES MAY SWEEPINGS BE SWEPT INTO OPEN DECK DRAINS, OVER THE EDGE OF THE BRIDGE. OR THROWN ALONG THE BANKS, OR INTO THE WATER.

ITEM 530 SPECIAL STRUCTURES MISC.: CLEANING BRIDGES

THE WORK SHALL CONSIST OF THE REMOVAL OF DIRT, SAND, SOIL, PAPER, GLASS, CANS, AND OTHER DEBRIS FROM DRAINAGE SYSTEMS, EXPANSION JOINTS, AND ABUTMENT SEATS. EQUIPMENT MAY CONSIST OF HAND TOOLS, MANUAL BROOMS, POWER BROOMS, AIR COMPRESSORS, WATER TANKS, WATER PUMPS WITH ASSOCIATED DELIVERY HARDWARE TO CLEAN, FLUSH, AND REMOVE DIRT AND DEBRIS.

THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A BRIDGE CLEANING WORK PLAN INDICATING LOCATIONS OF ALL TEMPORARY BMP INSTALLED TO CAPTURE ANY WASH WATER USED IN THE CLEANING PROCESS. THE PLAN SHALL INCLUDE INSPECTION AND DOCUMENTATION OF BMP PERFORMANCE PRIOR TO WORK AND IMMEDIATELY FOLLOWING THE WORK. INTERMEDIATE INSPECTION SHALL BE CONDUCTED EVERY 4 HOUR UNTIL WORK IS COMPLETED.

CONTRACTOR SHALL FURNISH ALL MATERIAL, EQUIPMENT, LABOR AND INCIDENTAL ITEMS NECESSARY TO PROPERLY REMOVE AND DISPOSE OF ALL DEBRIS AND OTHER FOREIGN MATERIAL BY POWER SWEEPING, SHOVELING, SCRAPING, ETC. FOLLOWED BY INSTALLING BMPs AS IDENTIFIED IN THE WORK PLAN FOR BRIDGE CLEANING, AND PRESSURE WASHING THE CURB LINES, SHOULDERS, JOINTS, SCUPPERS, DOWNSPOUTS, AND THE BRIDGE SEAT ALONG WITH THE END OF THE BEAMS.

THE FOLLOWING AREAS OF THE BRIDGE ARE TO BE CLEANED:

1. CLEANING JOINTS FOR THE FULL WIDTH OF THE BRIDGE:
   - A) PREVENT ALL DIRT, DEBRIS, AND WASHWATER FROM ENTERING ANY DRAINAGE SYSTEM DURING THE CLEANING OPERATIONS.
   - B) REMOVE AND COLLECT LOOSE DEBRIS FROM THE JOINTS PRIOR TO INTRODUCING WATER. CARE SHOULD BE TAKEN WHEN BREAKING UP DEBRIS IN THE JOINTS IN ORDER NOT TO DAMAGE THE ELASTOMERIC SEAL.
   - C) SWEEP AND COLLECT SAND, DEBRIS AND SEDIMENT BY USE PRESSURE WASHING THE JOINTS OR COMPRESSED AIR.

2. CLEANING SCUPPERS AND DOWNSPOUTS:
   - A) USE SHOVEL, HAND SCRAPERS, AND OTHER HAND TOOLS TO BREAK UP DEBRIS IN SCUPPERS TO THE MAXIMUM EXTENT PRACTICABLE. COLLECT LOOSE AND LARGE DEBRIS FROM THE SCUPPERS PRIOR TO INTRODUCING WATER.
   - B) PRESSURE WASH THE SCUPPERS AND DOWNSPOUTS FOR FINAL CLEANING.
   - C) ALL DIRT OR DEBRIS FROM THE CLEANING OPERATION SHALL BE REMOVED.

3. BRIDGE SEATS:
   - A) REMOVE WITH A SHOVEL, BROOM, HAND SCRAPER OR OTHER MECHANICAL MEANS, ALL GROSS SOLIDS FROM THE ENTIRE BEAM SEATS AND AROUND ALL AREAS SURROUNDING THE BEAM BEARINGS, TO THE MAXIMUM EXTENT PRACTICABLE PRIOR TO INTRODUCING WATERS.
   - B) AFTER REMOVING ALL GROSS SOLIDS PRESSURE WASH THE ABUTMENTS, BACKWALLS, BEAM SEATS AND THE END OF THE BEAMS AS SHOWN ON THE PLANS.

PRESSURE WASHING STRUCTURE CONCRETE

THE CONTRACTOR SHALL USE PORTABLE WATER FOR THE CLEANING OPERATION. DISCHARGING TO OR COLLECTING WATER FROM STREAMS IS PROHIBITED.

PRESSURE WASHER WATER PRESSURE SHALL BE CAPABLE OF 1,500 PSI. CONTRACTOR SHALL NOT PRESSURE WASH NEAR EXISTING UTILITIES OR BRIDGE ITEMS CONTAINING OR COATED WITH ASBESTOS OR TRANSITE. OPERATING PRESSURES SHALL BE SUFFICIENT TO REMOVE THE ACCUMULATED MATERIAL WITHOUT DAMAGING PAINT COVERAGE OF THE STRUCTURAL STEEL.

ITEM 530 SPECIAL STRUCTURES MISC.: CLEANING BRIDGES (CONTINUED)

BRIDGE DESIGNATED OVER A SUPERIOR OR OUTSTANDING WATERWAY REQUIRE ADDITIONAL PRECAUTIONS TO PREVENT WASH WATER FROM ENTERING THE WATERWAY. SHALL INCLUDE THE FOLLOW;

1. CLEANING JOINTS FOR THE FULL WIDTH OF THE BRIDGE:
   - A) SWEEP AND COLLECT SAND, DEBRIS AND SEDIMENT FROM THE JOINTS BY VACUUMING WASH WATER USING A VACUUM TRUCK.

2. CLEANING SCUPPERS AND DOWNSPOUTS:
   - A) REMOVE SCUPPER GRATE. USE SHOVEL, HAND SCRAPERS AND OTHER HAND TOOLS TO BREAK UP DEBRIS IN SCUPPERS TO THE MAXIMUM EXTENT PRACTICABLE. COLLECT LOOSE AND LARGE DEBRIS FROM THE SCUPPERS PRIOR TO INTRODUCING WATER.
   - B) SWEEP AND COLLECT SAND, DEBRIS AND SEDIMENT FROM THE SCUPPERS BY VACUUMING WASH WATER USING A VACUUM TRUCK.

3. BRIDGE SEATS:
   - A) REMOVE WITH A SHOVEL, BROOM, HAND SCRAPER OR OTHER MECHANICAL MEANS, ALL GROSS SOLIDS FROM THE ENTIRE BEAM SEATS AND AROUND ALL AREAS SURROUNDING THE BEAM BEARINGS.
   - B) IF THE OVERLAND FLOW FROM THE BRIDGE SEAT TO THE WATER'S EDGE IS LESS THAN 20 FEET, NO WATER SHALL BE USED. COMPRESSED AIR MAY BE USED

THE CONTRACTOR SHALL ENSURE THAT THE DRAINAGE SYSTEM REMAINS CLEAN AND FREE OF ALL DEBRIS UNTIL ALL WORK UNDER THIS CONTRACT IS COMPLETE. ANY DAMAGED OR DETERIORATED SYSTEMS SHALL BE REPORTED TO THE ENGINEER

PAYMENT FOR ALL OF THE ABOVE WILL BE MADE AT CONTRACT BID PRICE AS FOLLOWS:

ITEM 530 SPECIAL - STRUCTURE, MISC.: CLEANING OF DRAINAGE SYSTEMS.

ITEM 530 SPECIAL - STRUCTURE, MISC.: CLEANING OF BRIDGE JOINTS

ITEM 530 SPECIAL- STRUCTURE, MISC.: CLEANING OF BRIDGE SEATS

ITEM 614 - MAINTAINING TRAFFIC: SEE ROADWAY PLAN.

ESTABLISH TRAFFIC CONTROL OPERATIONS ON THE BRIDGE TO ENSURE WORKER SAFETY DURING MAINTENANCE ACTIVITIES. IF ROAD DEBRIS CAN FALL ON ACTIVE TRAFFIC BELOW BRIDGE, PROVIDE TRAFFIC CONTROL TO THE ROADWAY BELOW IN ACCORDANCE WITH THE ROADWAY PLANS.

DESIGN AGENCY
ODOT DISTRICT 4
CAPTIAL PLANNING

DESIGNED	DRAWN	REVIEWED	DATE
MJP	MJP	PD	8/24/20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PD	MJP		

PLAN INSERT SHEET - CLEANING DETAILS
TRU-80-0742, TRU-80-0798, TRU-80-0905, TRU-80-1026, TRU-80-1185

TRU-80-08.56
PID No. 96519

9 / 10

28 / 29

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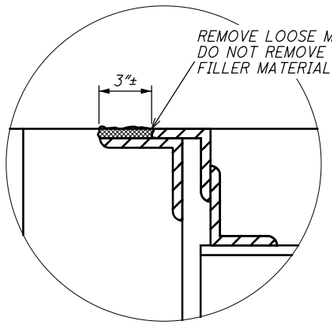
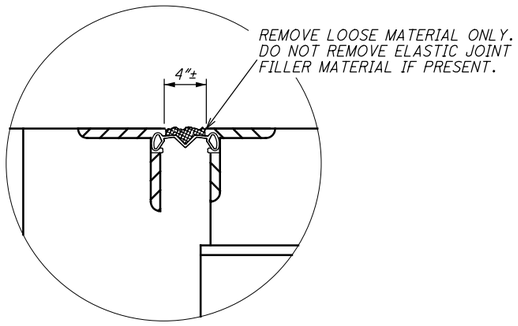


DETAIL "A"

(SLIDING PLATE)



DETAIL "A"

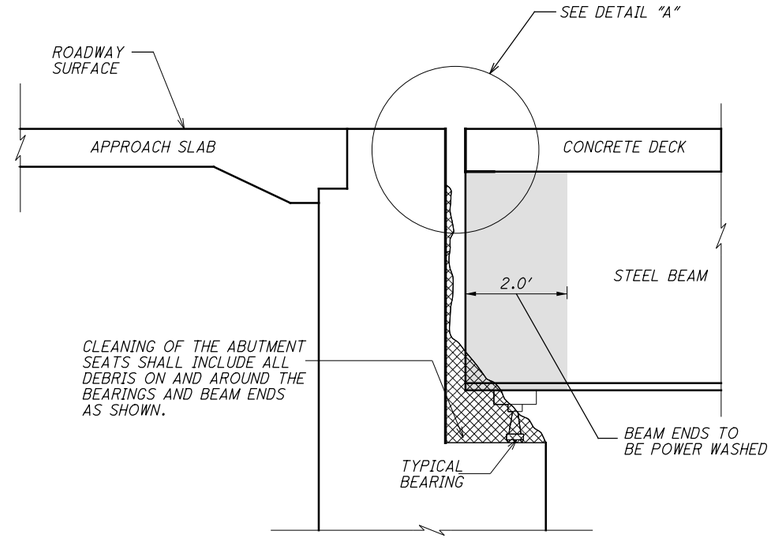
(STRIP SEAL)

AVOID PUNCTURE OR DAMAGE TO SEAL WHILE CLEANING

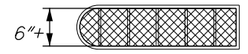
NOTES AND LEGEND:

REMOVE DEBRIS AND OTHER FOREIGN MATERIALS, THEN PRESSURE WASH WITH PORTABLE WATER AS DESCRIBED IN THE GENERAL NOTES.

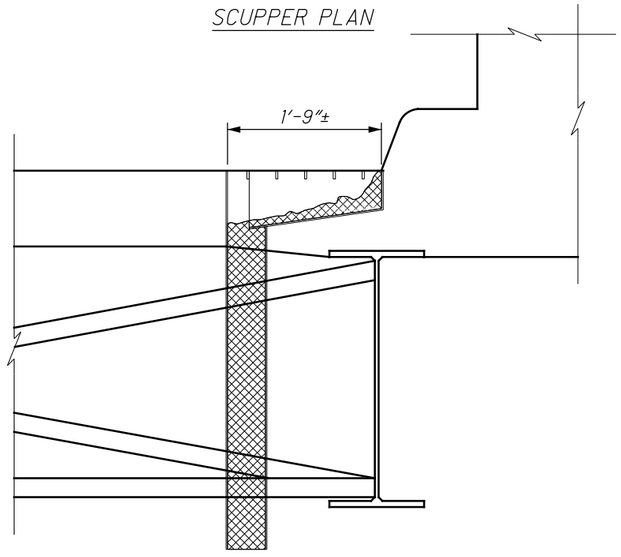
BACKWALL, ABUTMENT SEAT,
BEAM ENDS AND EXPANSION JOINT



TYPICAL ABUTMENT DETAIL



SCUPPER PLAN



SCUPPER AND DOWNSPOUTS SIDE VIEW

DESIGN AGENCY
ODOT DISTRICT 4
CAPTIAL PLANNING

DESIGNED	DRAWN	REVIEWED	DATE
MJP	MJP	PD	8/24/20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PD	MJP		

PLAN INSERT SHEET - CLEANING DETAILS

TRU-80-0742, TRU-80-0798, TRU-80-0905,
TRU-80-1026, TRU-80-1185

TRU-80-08.56

PID No. 96519

10 / 10

29
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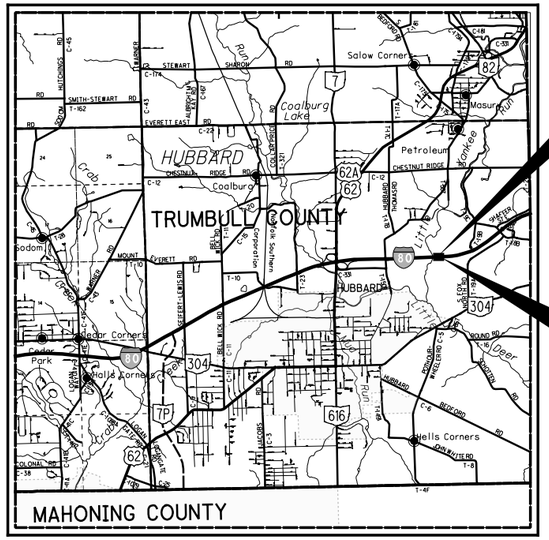

LOCATION MAP

LATITUDE: N41°10'40" LONGITUDE: W80°32'30"

SCALE IN MILES

0 1 2 3 4

N

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

DESIGN DESIGNATION

DESIGN SPEED 70 MPH
LEGAL SPEED 65 MPH
DESIGN FUNCTIONAL CLASSIFICATION:
01 INTERSTATE (RURAL)
NHS PROJECT YES

DESIGN EXCEPTIONS

NONE

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

TRU-80-10.99 PART 2

HUBBARD TOWNSHIP
TRUMBULL COUNTY

FOR PART 1, SEE TRU-80-8.56

INDEX OF SHEETS:

PROJECT DESCRIPTION

SLIDE REPAIR ON TRU-IR 80-10.99 (WESTBOUND).

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 0.23 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.25 ACRES
NOTICE OF INTENT EDA: N/A (NOI NOT REQUIRED)

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

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 IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non-members must be called directly)

PLAN PREPARED BY:
ODOT, DISTRICT 4
2088 SOUTH ARLINGTON ROAD
AKRON, OHIO 44306

ENGINEERS SEAL:

STATE OF OHIO · THOMAS J. POWELL · E-61151 · REGISTERED PROFESSIONAL ENGINEER

SIGNED: TJ Powell
DATE: 10/13/2020

STANDARD CONSTRUCTION DRAWINGS	SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
SEE PART 1 FOR SCD & SS		

APPROVED _____
DATE 10/13/2020 DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E190(995)
PID NO. 96519
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
TRU-80-10.99
1/10

ROUNDING
THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

UTILITIES
THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, OHIO811, THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEADQUARTERS (MICHELLE CHANEY AT 330-786-2267) AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ALL AREAS.

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT SHOWN ON THE PLANS, BUT CAN BE OBTAINED FROM THE OWNERS OF THE UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES.

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.

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
THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, SOIL ANALYSIS TEST	1 EACH
659, TOPSOIL	126 CU. YD.
659, REPAIR SEEDING AND MULCHING	57 SQ. YD.
659, COMMERCIAL FERTILIZER	0.15 TON
659, LIME	0.23 ACRES
659, WATER	6 M. GAL.
671, EROSION CONTROL MAT, TYPE E	1135 SQ. YD.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

SURVEYING PARAMETERS
PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE THIS SHEET FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:
COUNTY: TRU ROUTE: 80 SECTION: 10.99
PID#: 111576
SURVEY DATE: DECEMBER 2019

VERTICAL POSITIONING
ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: 2012A

HORIZONTAL POSITIONING
REFERENCE FRAME: NAD 83 (2011) (EPOCH: 2010.0000)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO NORTH ZONE (3401)
COMBINED SCALE FACTOR: 0.99989997311
ORIGIN OF SCALE (X,Y) - EASTING (X): 0, NORTHING (Y): 0

UNITS
UNITS ARE IN U.S. SURVEY FEET. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.28083333333 U.S. SURVEY FEET.

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

CONTROL POINTS (U.S. SURVEY FEET [GRID])

POINT	NORTH	EAST	STATION	OFFSET (STA. OFFSET TO CLRW80)	ELEV. NAVD88 (GEOID12A)
M584	556277.2430	2507436.5200	584+00.00	0.00	
	Feature: CMON Fnd & Used for stationing				
M592	556307.8060	2508266.5490	592+30.59	0.00	973.13
	Feature: CMON Fnd & Used				
M598	556364.4900	2508832.4060	597+99.66	-0.06	
	Feature: CMON				
M604	556500.8860	2509415.9330	603+99.39	-0.43	
	Feature: CMON				
M614	556919.2890	2510376.0900	614+49.14	0.07	
	Feature: CMON				
M621	557334.6960	2510972.8250	621+77.01	0.00	
	Feature: CMON Fnd & Used				
BM1	556310.9388	2507348.1013	583+12.9	-36.9	946.17
	Feature: BM "x" Cut on the Northeast bolt at the southeast end of a Southerly bridge Rail on the West bound bridge				
T10	556292.0890	2507871.7500	588+35.48	1.18	961.79
	Feature: IPINS #5 Rebar set w/ODOT cap				
T15	556435.1294	2507897.5501	588+66.53	-140.82	
	Feature: IPINS #5 Rebar set w/ODOT cap				
T20	556410.7445	2507826.9906	587+95.12	-119.04	
	Feature: IPINS #5 Rebar set w/ODOT cap				
T30	556512.0792	2507802.0103	587+73.88	-221.23	
	Feature: IPINS #5 Rebar set w/ODOT cap				
T35	556402.7987	2507900.7589	588+68.54	-108.39	
	Feature: IPINS #5 Rebar set w/ODOT cap				

WETLANDS AVOIDANCE
NO EXCAVATION, GRADING OR FILLING OPERATIONS SHALL BE PERFORMED IN THE WETLANDS DELINEATED BEYOND THE PROJECT CONSTRUCTION LIMITS AND DEPICTED IN THE PROJECT PLANS. TO PROTECT AND DELINEATE THE BOUNDARIES OF THE EXISTING RESOURCES, A FILTER FABRIC FENCE AND TEMPORARY CONSTRUCTION FENCE PER SUPPLEMENTAL SPECIFICATION 832, SHALL BE INSTALLED AT THE PROPOSED CONSTRUCTION LIMITS, MAINTAINING A ONE-FOOT BUFFER BETWEEN THE FENCE AND THE WETLAND BOUNDARIES, WHEN PRACTICABLE, PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES, INCLUDING ANY NECESSARY CLEARING AND GRUBBING ACTIVITIES, AND BE MAINTAINED BY THE CONTRACTOR THROUGHOUT PROJECT CONSTRUCTION. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR STORE EQUIPMENT AND/OR MATERIALS IN ANY WETLANDS, ETC. ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS SECTION 107.10 (PROTECTION AND RESTORATION OF PROPERTY) PROHIBITS THE CONTRACTOR FROM CREATING STAGING AREAS NEAR STREAMS AND/OR WETLANDS.

ENDANGERED SPECIES HABITAT - INDIANA BAT/NORTHERN LONG-EARED BAT
THE PROJECT SITE IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES BEYOND THE PROPOSED GRADING LIMITS DEPICTED IN THE PROJECT PLANS (SHEET 8) SHALL BE REMOVED AT THIS LOCATION. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET. FOR TREES WITHIN THE PROPOSED GRADING LIMITS, NO TREES SHALL BE REMOVED AT THIS LOCATION FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THESE REQUIREMENTS ARE NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT.

CALCULATED RCB CHECKED TJP

GENERAL NOTES

TRU-80-10.99

MAINTENANCE OF TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

1. TWO ELEVEN FOOT LANES SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK EXCEPT WHEN PERMITTED BY THE PERMITTED LANE CLOSURE CHART.

2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2208, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.

3. LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.

4. TRUCK MOUNTED ATTENUATORS [TMA'S] SHALL BE USED AS SHOWN IN THE STANDARD CONSTRUCTION DRAWINGS.

5. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE SUCCESSIVE WORK ZONES UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES OR CONES EXCEEDS ONE [1] MILE.

LANE CLOSURES

DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AS PER THE PERMITTED LANE CLOSURE CHART. THE PERMITTED LANE CLOSURE CHART USED FOR THIS PROJECT SHALL BE THE MOST CURRENT CHART AVAILABLE ON THE DATE THIS PROJECT SELLS.

THE CHART CAN BE FOUND AT:
http://plcm.dot.state.oh.us

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THE REQUIREMENTS IN THE CHART, THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES IN THE AMOUNT OF $6,000 PER HOUR OR PORTION THEREOF THAT THE LANE REDUCTION REMAINS BEYOND THE SPECIFIED LIMIT.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 3 M. GAL.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL BE ADVISED THAT PROJECT TRU-80-08.56 (PID 96519) MAY BE ONGOING IN AN AREA IMMEDIATELY ADJACENT TO AND WITHIN THE PROJECT LIMITS OF THIS PROJECT. THE CONTRACTOR SHALL SCHEDULE HIS WORK SO AS TO CAUSE A MINIMUM OF DELAY OR CONFLICT WITH THE OTHER PROJECTS. IN ACCORDANCE WITH 105.08, THE CONTRACTOR SHALL ARRANGE WITH THE OTHER CONTRACTORS APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL RECEIVE DAILY APPROVALS FROM THE ENGINEER PRIOR TO COMMENCING ANY OPERATIONS. ANY CONFLICT BETWEEN CONTRACTORS INVOLVING WORK SCHEDULES, WORK AREA, OR COOPERATION SHALL BE RESOLVED BY THE ENGINEER. COMPENSATION FOR THE ABOVE COOPERATION SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS INCLUDED WITHIN THIS PROJECT.

TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REPRESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

ITEM 622 - PORTABLE BARRIER PLACEMENT

DURING THE PLACEMENT OF THE PORTABLE BARRIER, TRAFFIC WILL BE PROHIBITED FROM OCCUPYING THE TRAVEL LANE ADJACENT TO THE BARRIER. THE BARRIER WILL BE PLACED AT NIGHT PER THE WORK HOUR RESTRICTION NOTE AND IN ACCORDANCE WITH THE PERMITTED LANE CLOSURE MAP. THE CLOSURE OF THE ADJACENT LANE WILL BE PER THE STANDARD DRAWING MT-95.30.

THE CONTRACTOR WILL SUBMIT A PLAN TO THE ENGINEER FOR APPROVAL SEVEN (7) DAYS IN ADVANCE OF THE PLANNED LANE CLOSURE. WORK WILL NOT BEGIN UNTIL APPROVAL OF THE PLANS HAS BEEN GRANTED.

ALL COSTS INVOLVED IN PLACING THE PORTABLE CONCRETE BARRIER WILL BE INCLUDED IN THE CONTRACT PRICE BID FOR ITEM 622 PORTABLE CONCRETE BARRIER.

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 REQUIREMENTS OF CMS 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) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.
- DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).
- 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).

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.

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, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONE.

THE LEOS WORK AT THE DIRECTION OF THE ENGINEER. 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 100 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.

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 SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). 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 CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
ROAD & RAMP CLOSURES	>= 2WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	<12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>=2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERNS CHANGES	N/A	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 NOTIFICATION TIME TABLE.

CALCULATED MJP CHECKED TJP

MAINTENANCE OF TRAFFIC NOTES

TRU-80-10.99

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. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. 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 SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.) 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 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, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN, 3 SIGN MONTH, ASSUMING 1 PCMS SIGN FOR 3 MONTHS

LANE SHIFT AND SHOULDER CLOSURE

A LANE SHIFT WILL BE REQUIRED AROUND THE WORK ZONE SHOULDER CLOSURE AS PER SCD MT-102.10. SIGNAGE FOR THIS LANE SHIFT IS NOT REQUIRED PER THE SCD. WORK ZONE DETAILS MAY BE FOUND ON SHEETS 5-6.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 614, WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL) 1 EA

ITEM 614, WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT, 0.21 MI

ITEM 614, WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT, 1121 FT

ITEM 622, PORTABLE BARRIER, UNANCHORED 200 FT

ITEM 614, WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL OR BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1 (ONE-WAY) 5 EACH

ITEM 614, OBJECT MARKER, ONE-WAY 5 EACH

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

CALCULATED MJP CHECKED TJP

MAINTENANCE OF TRAFFIC NOTES

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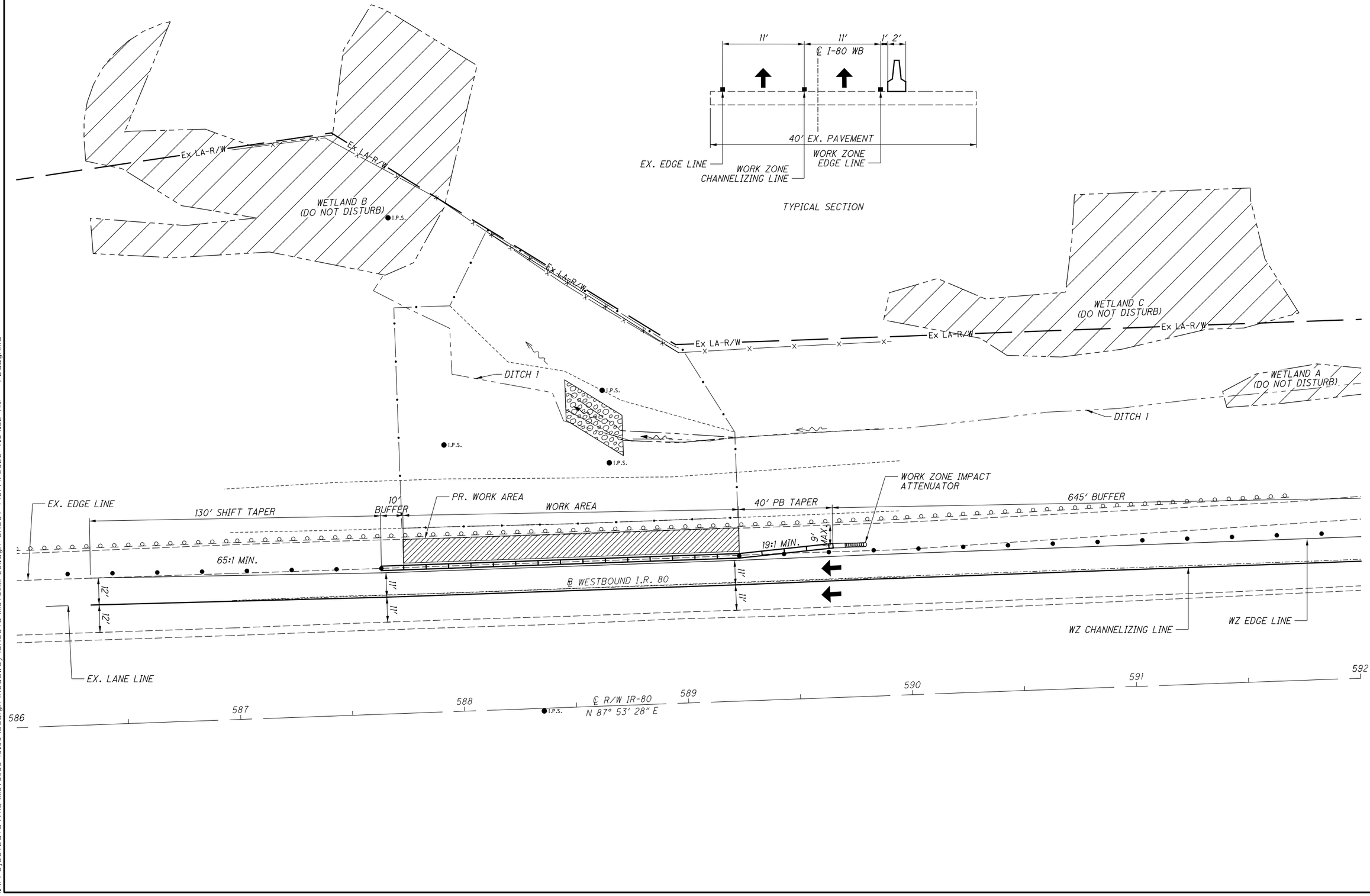

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HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED MJP
CHECKED TJP

MAINTENANCE OF TRAFFIC PLAN
I-80 WB - STA. 586+00 - 592+00

TRU-80-10.99

PLACE SIGNS WITH ORANGE SIGN POST REFLECTORS AT THE FOLLOWING STATIONS:

TYPE A WARNING LIGHT

ROAD WORK AHEAD

W20-1-48

1500 FEET

W16-2P-30

STA. 617+00 LT/RT

TYPE A WARNING LIGHT

RIGHT SHOULDER CLOSED

W21-5aR-48

1000 FEET

W16-2P-30

STA. 612+00 LT/RT

TYPE A WARNING LIGHT

RIGHT SHOULDER CLOSED

W21-5aR-48

500 FEET

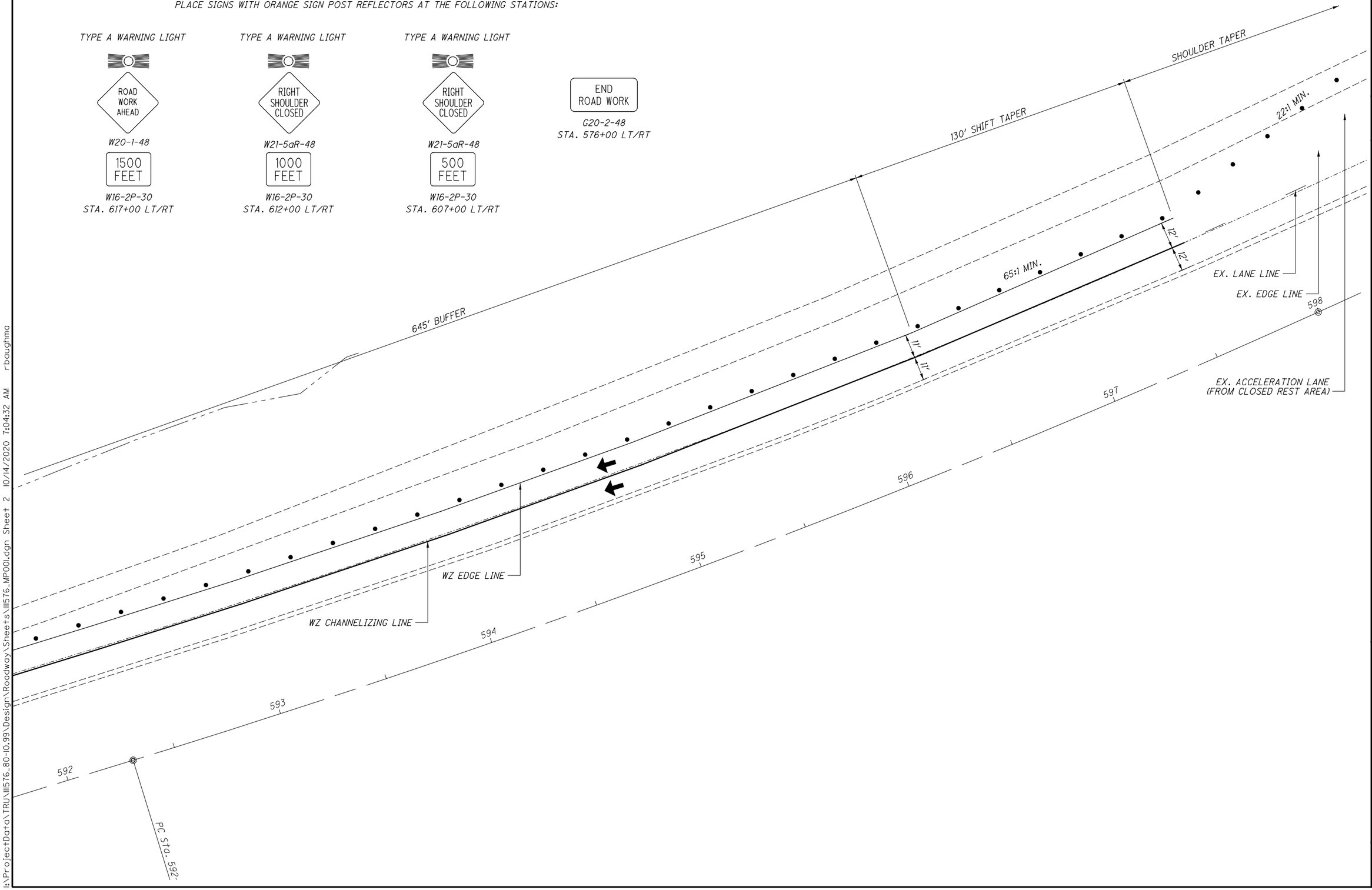
W16-2P-30

STA. 607+00 LT/RT

END ROAD WORK

G20-2-48

STA. 576+00 LT/RT



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HORIZONTAL SCALE IN FEET

0 10 20 40

CALCULATED MJP

CHECKED TJP

MAINTENANCE OF TRAFFIC PLAN
I-80 WB - STA. 592+00 - 598+00

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SHEET NUM.													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
							2	3	4	8	9	10	05/IMS/PV						
																		ROADWAY	
													LS	201	11000	LS		CLEARING AND GRUBBING	
										100			100	202	75000	100	FT	FENCE REMOVED	
												2	2	203	10000	2	CY	EXCAVATION	
											694	702	1,396	203	20000	1,396	CY	EMBANKMENT	
										100			100	607	15000	100	FT	FENCE, TYPE 47	
																		EROSION CONTROL	
										42			42	601	32104	42	CY	ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC	
							1						1	659	00100	1	EACH	SOIL ANALYSIS TEST	
							126						126	659	00300	126	CY	TOPSOIL	
							57						57	659	14000	57	SY	REPAIR SEEDING AND MULCHING	
							0.15						0.15	659	20000	0.15	TON	COMMERCIAL FERTILIZER	
							0.23						0.23	659	31000	0.23	ACRE	LIME	
							6						6	659	35000	6	MGAL	WATER	
							1,135						1,135	671	15040	1,135	SY	EROSION CONTROL MAT, TYPE E	
													2,000	832	30000	2,000	EACH	EROSION CONTROL	
																		MAINTENANCE OF TRAFFIC	
								100					100	614	11110	100	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
									1				1	614	12380	1	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
									5				5	614	13310	5	EACH	BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	
									5				5	614	13350	5	EACH	OBJECT MARKER, ONE WAY	
									3				3	614	18601	3	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	4
									0.21				0.21	614	22110	0.21	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	
									1,121				1,121	614	23210	1,121	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT	
								3					3	616	10000	3	MGAL	WATER	
									200				200	622	41100	200	FT	PORTABLE BARRIER, UNANCHORED	
																		INCIDENTALS	
													LS	614	11000	LS		MAINTAINING TRAFFIC	
													6	619	16010	6	MNTH	FIELD OFFICE, TYPE B	
													LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
													LS	624	10000	LS		MOBILIZATION	

CALCULATED RCB
CHECKED TJP

GENERAL SUMMARY

TRU-80-10.99

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STATION TO STATION					202	601	607
					FENCE REMOVED	ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC	FENCE, TYPE 47
					FT	CY	FT
588+50.00	LT	TO	588+75.00	LT		41.81	
588+18.60	LT		589+01.20	LT	100		100
TOTALS TO GEN. SUM.					100	42	100

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED RCB
CHECKED TJP

R/W
Ex LA-R/W
WETLAND B (DO NOT DISTURB)
I.P.S.
INTERMEDIATE POST ASSEMBLY STA. 588+18.60, 212.71' LT
FENCE, TYPE 47 100'
FENCE REMOVED 100'
CONST. LIMITS
BEYOND THIS PROPOSED GRADING LINE, DO NOT DISTURB TREES WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.
CORNER POST ASSEMBLY STA. 589+01.20, 156.35' LT
Ex LA-R/W
WETLAND C (DO NOT DISTURB)
DITCH 1
5'
4:1
RCP, TYPE B W/GEOTEXTILE FABRIC (15x30.1x2.5/27 = 41.8 CY)
30.1'
WETLAND A (DO NOT DISTURB)
CONST. LIMITS
℄ WESTBOUND I.R. 80
587 588 589 590 591 592 593
℄ R/W IR-80
N 87° 53' 28" E
PC Sta. 592+30.59
BEGIN WORK/PROJECT
STA. 587+75
S.L.M. 10.99
E190(995)
END WORK/PROJECT
STA. 589+25
S.L.M. 11.02
E190(995)

PLAN SHEET - I.R. 80
STA. 586+00 TO STA. 591+00

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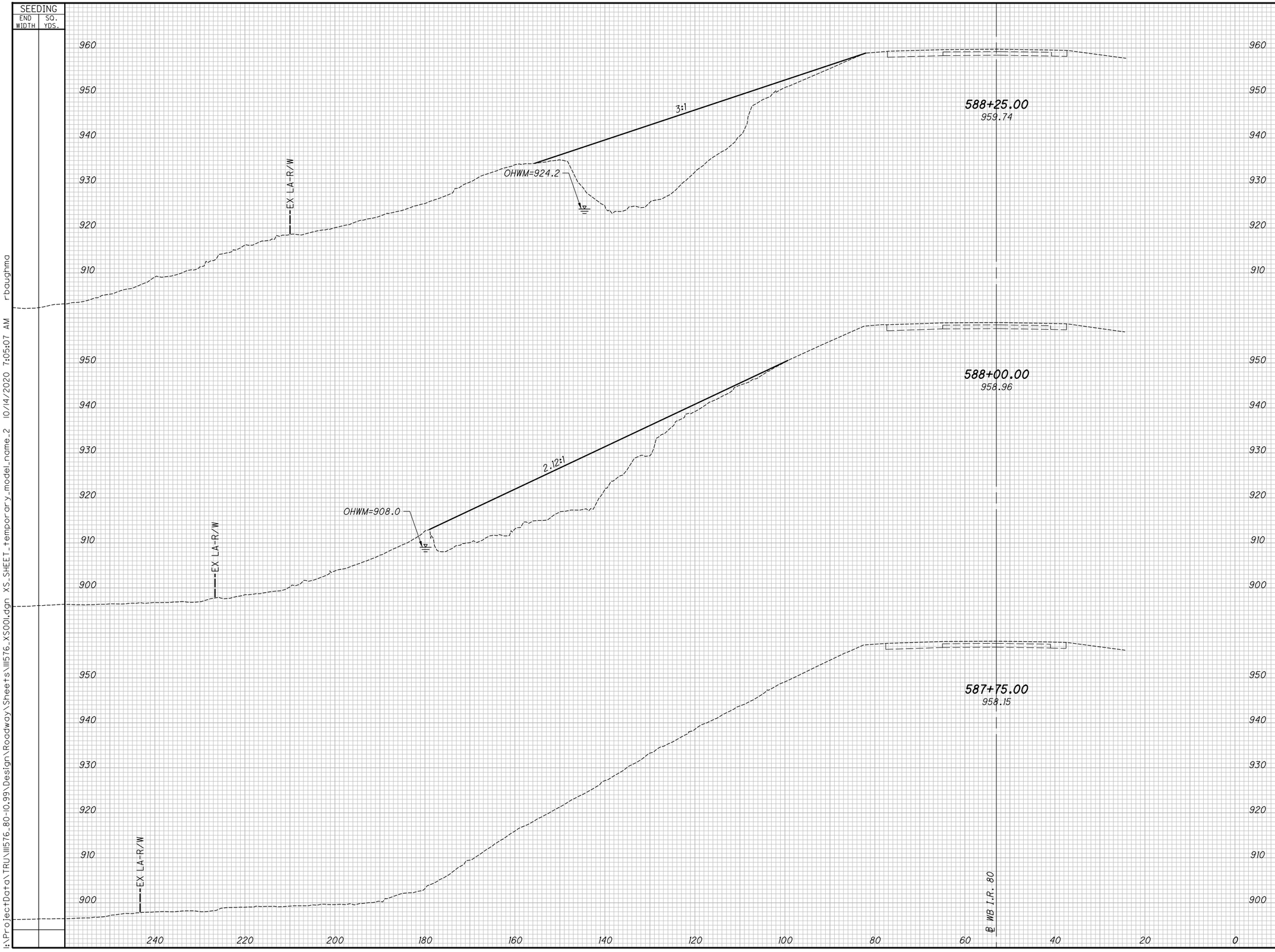
SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	584		
		0	482
0	457		
		0	212
0	0		
		0	694

CALCULATED RCB
CHECKED TJP

CROSS SECTIONS - I.R. 80
STA. 587+75.00 TO STA. 588+25.00

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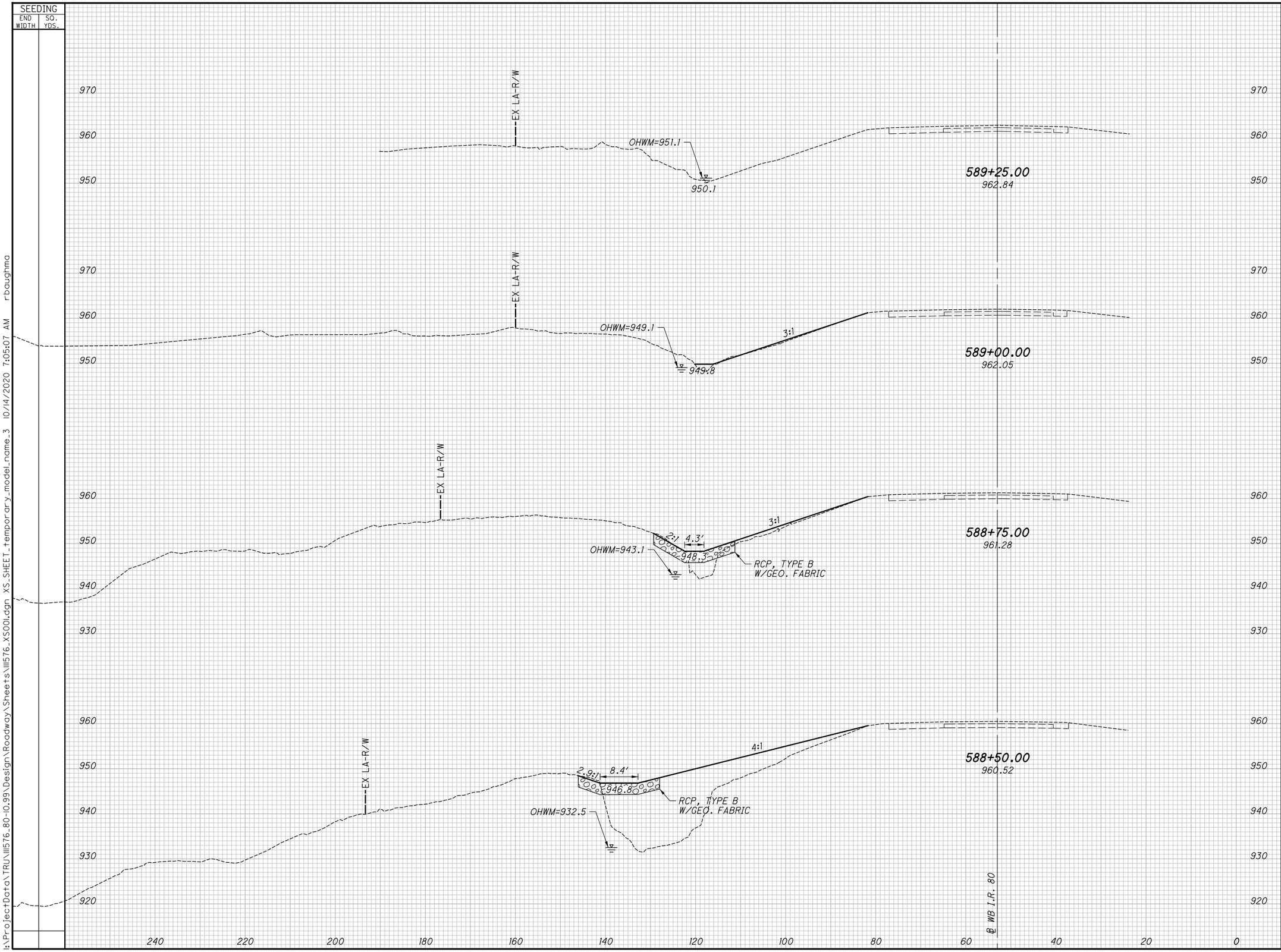
SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0		
		1	4
1	8		
		1	27
0	51		
		0	212
0	407		
		0	459
		2	702

CALCULATED RCB
CHECKED TJP

CROSS SECTIONS - I.R. 80
STA. 588+50.00 TO STA. 589+25.00

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