

OFFICE OF THE ALLEN COUNTY ENGINEER
ALL CR VAR GR FY 19
ALLEN COUNTY GUARDRAIL
SAFETY IMPROVEMENT PROJECT
ALLEN COUNTY, OHIO

COUNTY GUARDRAIL SAFETY IMPROVEMENT PROJECT		OHIO	1
ALLEN COUNTY OHIO		FHWA REGION 5	9
FID NUMBER: 97438	FEDERAL PROJECT NUMBER: E 150(426)	FEDERAL PROJECT	

2016 SPECIFICATIONS

The standard specifications of The State of Ohio, Department of Transportation, Dated January 1, 2016 including changes and supplemental specifications listed in the proposal shall govern the construction of this project.

We the Board of Allen County Commissioners of Allen County, Ohio, in formal session, hereby approve these plans and certify that the necessary Right-of-Way is available.

APPROVED:
2-1-18

BOARD OF ALLEN COUNTY COMMISSIONERS

2-1-18

2/3/18
DATE

[Signature]
[Signature]
[Signature]

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the roadway.

APPROVED:
01-31-18
DATE

[Signature]
ALLEN COUNTY ENGINEER

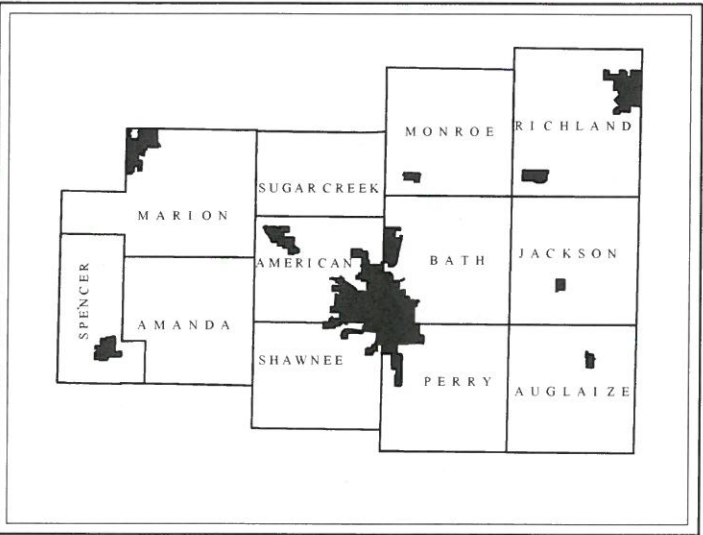
PROJECT EARTH DISTURBED AREA: N/A (Maintenance Project)
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A (Maintenance Project)
NOTICE OF INTENT EARTH DISTURBED AREA: N/A (Maintenance Project)

CONVENTIONAL SIGNS

County Line ————
Township Line ————
Section Line ———— SECTION 34
Corporation Line ———— or ————
Fence Line (existing) —X—X— (proposed) —X—X—
Center Line —10+00—11+00—12+00—13+00—14+00—
Existing Communications Line ———— T ———— T ————
Existing San. Sewer (to be abandoned) —X—X—X—
Trees Stumps (to be removed)
Utility Poles: Telephone Power Light
Limited Access (only) ———— LA ————
Right of Way (only) ———— R/W ————
Limited Access & Right of Way ———— LA & RW ————
Existing Right of Way ———— EX R/W ———— EX R/W ————
Proposed Right-of-Way ———— PROP R/W ————
Property Line ———— PL ———— (in existing fence) —X—R—X—
Railroad ———— or ————
Existing Water Main (to be abandoned) —X—X—X—
Guardrail (existing) (proposed)
Signs (existing) (proposed)

INDEX OF SHEETS

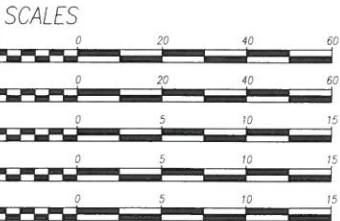
Title Sheet	1
General Notes	2
Sub Summary	3
General Summary	4
Location Maps	5-9



VICINITY MAP

PORTION TO BE IMPROVED ————
STATE ROUTES ———— 81 ————
OTHER ROADS ————
DETOUR ROUTE ————

Plan
Profile: Horizontal
Profile: Vertical
Cross Sections: Horizontal
Cross Sections: Vertical



STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	
GR-1.1	1-18-2013	GR-5.1	1-18-2013	MT-97.10	7-18-2014	832	1-17-2014
GR-2.1	1-18-2013	GR-5.2	1-18-2013	MT-105.10	7-19-2013		
GR-4.1	1-18-2013	GR-5.3	1-18-2013				
GR-4.2	1-18-2013			TC-41.10	7-19-2013		
				TC-41.20	10-18-2013		

ENGINEER'S SEAL:

SIGNED: *[Signature]*
DATE: 11-3-17

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON MEMBERS
MUST BE CALLED DIRECTLY

Plans Prepared By:
Allen County Engineer
1501 N. Sugar St.
Lima, Ohio 45801

WORK REQUIREMENTS

THIS IS A ALLEN COUNTY ENGINEER PROJECT FOR GUARDRAIL REPAIR AND/OR REPLACEMENT. THE INTENT OF THIS PROJECT IS TO REPAIR THE DAMAGED GUARDRAIL, POSTS AND ANCHOR ASSEMBLIES ON VARIOUS ROUTES IN ALLEN COUNTY, AS LISTED IN THESE PLANS.

WORK:

ITEMS OF WORK SHALL BE APPROVED BY THE ENGINEER. THE INTENT OF THIS PROJECT IS TO REPAIR ANY DAMAGED GUARDRAIL WITHIN THE LOCATIONS DESIGNATED IN THE PLANS. THE LOCATIONS AND ESTIMATED AMOUNT OF RAIL TO BE REPAIRED/REPLACED ARE NOTED ON SHEETS 3-4. ALL WORK SHALL CONFORM TO THE SPECIFICATIONS IN THE ODOT L & D MANUAL ~ SECTION 600.

THE CONTRACTOR SHALL NOT PERFORM ANY GUARDRAIL WORK UNTIL HE RECEIVES THE AUTHORIZATION FROM THE ENGINEER.

WITHIN 14 DAYS OF RECEIVING AUTHORIZATION FROM THE ENGINEER TO START WORK AT A DESIGNATED LOCATION, THE CONTRACTOR SHALL COMPLETE THE WORK. AS LONG AS THERE IS UNCOMPLETED WORK, THE CONTRACTOR SHALL CONTINUALLY PURSUE THE COMPLETION OF THE WORK OR BE SUBJECT TO TERMINATION OF THE CONTRACT AS PROVIDED FOR IN THE FOLLOWING SECTION. NO NEW WORK LOCATIONS SHALL BE INITIATED BY THE CONTRACTOR PRIOR TO THE COMPLETION OF WORK AT ANY GIVEN LOCATION, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

PERSONNEL:

THE CONTRACTOR WILL MAINTAIN A MINIMUM FOUR (4) PERSON CREW OF QUALIFIED PERSONNEL AND EQUIPMENT, OR AS REQUIRED BY THE ENGINEER, TO PERFORM THE WORK FOR THE DURATION OF THE CONTRACT.

MATERIALS ON HAND:

AT ALL TIMES, THE CONTRACTOR SHALL MAINTAIN ON HAND, AND HAVE IN STOCK, GUARDRAIL MATERIAL, SUFFICIENT MATERIAL TO COMPLETE 25% OF THE INCOMPLETE CONTRACT BID ITEMS, UP TO THAT TIME THAT 75% OF THE QUANTITY FOR THAT ITEM HAS BEEN COMPLETED. AT THIS TIME THE CONTRACTOR SHALL STOCK SUFFICIENT MATERIALS TO COMPLETE THE PROJECT AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL RECEIVE PAYMENT FOR THESE MATERIALS IN ACCORDANCE WITH CMS ITEM 109.04, PAYMENT FOR MATERIAL ON HAND.

MATERIALS SHALL INCLUDE: GALVANIZED BEAM RAIL, STEEL POSTS, SPACER BLOCKS, FLARED END SECTIONS, TERMINAL CONNECTORS, BOLTS, NUTS AND WASHERS AS SHOWN IN THE STANDARD DRAWINGS AS LISTED ON SHEET 1 OF THE PLAN.

PROTECTION OF INCOMPLETE WORK

ANY HAZARD DURING NON-WORKING HOURS SHALL BE ADEQUATELY PROTECTED WITH DRUMS OR BARRICADES, OR AS DIRECTED BY THE ENGINEER. FOR ANY SUCH WORK REQUIRED, IT SHALL BE CONSIDERED AS INCIDENTAL AND INCLUDED IN THE UNIT PRICE BID FOR THE APPROPRIATE REPAIR ITEMS.

ITEM 202 GUARDRAIL REMOVED, AS PER PLAN

THIS ITEM INCLUDES THE REMOVAL OF ALL END ASSEMBLIES, POSTS, GUARDRAIL, HARDWARE, ETC.. ALL MATERIALS ARE TO BE DISPOSED OF BY THE CONTRACTOR.

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.

GUARDRAIL (GENERAL PROVISIONS)

ALL MATERIAL EXCAVATED FOR POST HOLES OR CONCRETE ANCHORS SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH ITEM 202 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS AND THE AREA RESTORED TO A NEAT CONDITION SATISFACTORY TO THE ENGINEER. THE COST OF THIS WORK IS TO BE INCLUDED IN THE APPLICABLE GUARDRAIL BID ITEM. THE LOCATIONS OF THE GUARDRAIL RUNS AS SHOWN IN THESE PLANS ARE SUBJECT TO ADJUSTMENTS TO ASSURE THAT THE PLANNED INSTALLATION WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. BECAUSE OF THE NATURE OF THE WORK REQUIRED BY THIS PROJECT, THE EXACT LOCATION OF ANY UNDERGROUND UTILITIES THAT EXIST IS UNKNOWN. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN THE AREAS WITH UNDERGROUND WATERLINES, DRAINS, CABLES, SEWERS OR OTHER UTILITIES. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ALL DAMAGE INFLICTED ON UNDERGROUND UTILITIES IN THE EXECUTION OF THIS CONTRACT. SECTIONS 105.07 AND 107.16 OF THE C&MS REQUIRE, AMONG OTHER THINGS, THAT THE CONTRACTOR COOPERATE WITH ALL UTILITIES LOCATED WITHIN THE LIMITS OF THIS CONSTRUCTION PROJECT AND TAKE FULL RESPONSIBILITY FOR THE PROTECTION OF THE UTILITY PROPERTY AND SERVICES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ANY UTILITIES THAT MAY BE AFFECTED BY THE WORK PERFORMED FOR THIS CONTRACT. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE OHIO UTILITY PROTECTION SERVICE (OUPS) AND ALL NON-REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS SO THAT THE COMPANIES CAN LOCATE AND MARK THE LOCATION OF THEIR FACILITIES BEFORE ANY EXCAVATION OR POST DRIVING BEGINS.

THE CONTRACTOR SHALL ALSO LOCATE AND AVOID UNDERGROUND DRAINAGE PIPES NOT ASSOCIATED WITH A PARTICULAR UTILITY COMPANY. IF ANY CONFLICTS OCCUR THE ENGINEER SHALL DETERMINE WHETHER THE POSITION OF THE GUARDRAIL CAN BE ADJUSTED TO AVOID THE UTILITY OR IF RELOCATION OF THE UTILITY WILL BE REQUIRED.

ITEM 606 ANCHOR ASSEMBLY REBUILT, TYPE A, AS PER PLAN

THIS ITEM OF WORK IS TO BE USED TO RECONSTRUCT AN EXISTING TYPE A ANCHOR ASSEMBLY AS DIRECTED BY THE ENGINEER. THE UNIT BID PRICE SHALL INCLUDE ALL LABOR, TOOLS, MATERIALS AND EQUIPMENT TO REMOVE AND REBUILD ALL DAMAGED COMPONENTS INCLUDING THE 36 INCH CONCRETE ANCHOR. THIS ITEM SHALL ALSO INCLUDE ANY REALIGNMENT OF ADJACENT RAIL SECTIONS TO CONNECT TO THE REBUILT ANCHOR ASSEMBLY. ALL WORK SHALL BE PER STANDARD DRAWINGS AT THE LOCATION AND OFFSET AS DIRECTED BY THE ENGINEER. PAYMENT FOR THIS ITEM SHALL BE FOR EACH INSTALLATION COMPLETE AND INCLUDED IN THE UNIT PRICE BID FOR ITEM 606 - ANCHOR ASSEMBLY REBUILT, TYPE A, AS PER PLAN.

ITEM SPECIAL MAILBOX / SIGN REMOVE AND RESET:

THIS WORK SHALL CONSIST OF REMOVING AND ERECTING MAILBOXES/MAILBOX SUPPORTS AND VARIOUS SIGNS IN ACCORDANCE WITH PLAN DETAILS AT LOCATIONS ESTABLISHED BY THE ENGINEER. POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY MAILBOX/MAILBOX SUPPORT OR SIGN DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION. PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS. TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.10. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY. MAILBOXES/MAILBOX SUPPORTS AND VARIOUS SIGNS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR ITEM SPECIAL MAILBOX / SIGN REMOVE AND RESET.

ITEM 606 GUARDRAIL REBUILT, TYPE 5, AS PER PLAN

THIS ITEM SHALL BE CONSTRUCTED WITH GALVANIZED STEEL POSTS AND GALVANIZED STEEL SPACER BLOCKS.

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO REMOVE AND REBUILD DAMAGED SECTIONS OF TYPE 5 GUARDRAIL AS DIRECTED BY THE ENGINEER. THIS ITEM SHALL INCLUDE REPLACING DAMAGED GUARDRAIL PANELS, POSTS AND ASSOCIATED HARDWARE WITHIN THE LENGTH OF THE REPAIR AND ALL OTHER WORK NEEDED TO RESET AND ALIGN POSTS AND GUARDRAIL DEEMED FIT FOR RE-USE BY THE ENGINEER. NEW POSTS SHALL BE STEEL PER STANDARD DRAWINGS AND SHALL MATCH THE EXISTING POST TYPE FOR EACH PARTICULAR GUARDRAIL RUN. THE TYPE OF POST SHALL BE SPECIFIED BY THE ENGINEER ON THE WORK ORDER. IT IS ESTIMATED THAT OF THE TOTAL PLAN QUANTITY, 100% WILL BE USING STEEL POST CONSTRUCTION. ADJUSTMENTS TO ADJACENT RAIL SECTIONS TO RE-ESTABLISH PROPER POST SPACING, IF REQUIRED BY THE ENGINEER, WILL BE CONSIDERED INCIDENTAL TO THIS ITEM AND WILL BE INCLUDED IN THE UNIT PRICE BID PER FOOT. THE ENGINEER WILL DESIGNATE REMOVAL AND REPLACEMENT LIMITS. MATERIALS SHALL BE NEW ITEMS FOR THIS CONTRACT. THE COST OF NEW STEEL POSTS SHALL BE INCORPORATED INTO THE UNIT BID FOR THIS ITEM AND WILL NOT BE PAID FOR SEPARATELY.

ITEM 606 ANCHOR ASSEMBLY REBUILT, TYPE T, AS PER PLAN

THIS ITEM OF WORK IS TO BE USED TO RECONSTRUCT AN EXISTING INSTALLATION OF A TYPE T ANCHOR ASSEMBLY AS DIRECTED BY THE ENGINEER. THE UNIT BID PRICE SHALL INCLUDE ALL LABOR, TOOLS, MATERIALS AND EQUIPMENT TO REMOVE AND REBUILD ALL DAMAGED COMPONENTS INCLUDING CONCRETE POST ENCASEMENT. THIS ITEM SHALL ALSO INCLUDE ANY RE-ALIGNMENT OF ADJACENT RAIL SECTIONS TO CONNECT TO THE REBUILT ANCHOR ASSEMBLY. ALL WORK SHALL BE PER STANDARD DRAWINGS AT THE LOCATION AND OFFSET AS DIRECTED BY THE ENGINEER. PAYMENT FOR THIS ITEM SHALL BE FOR EACH INSTALLATION COMPLETE AND INCLUDED IN THE UNIT PRICE BID FOR ITEM 606 - ANCHOR ASSEMBLY REBUILT, TYPE T, AS PER PLAN.

ITEM 606 GUARDRAIL MISC.: POST REPLACEMENT, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO REMOVE AND REPLACE DAMAGED GUARDRAIL POSTS INCLUDING ASSOCIATED HARDWARE AS DIRECTED BY THE ENGINEER. NEW POSTS SHALL BE STEEL PER STANDARD DRAWINGS AND SHALL MATCH THE EXISTING POST TYPE FOR EACH PARTICULAR GUARDRAIL RUN. THE TYPE OF POST SHALL BE SPECIFIED BY THE ENGINEER ON THE WORK ORDER. IT IS ESTIMATED THAT OF THE TOTAL PLAN QUANTITY, 100% WILL BE USING STEEL POST CONSTRUCTION. THE ENGINEER WILL DESIGNATE REMOVAL AND REPLACEMENT LIMITS. MATERIALS SHALL BE NEW ITEMS FOR THIS CONTRACT. THE COST OF NEW STEEL POSTS SHALL BE INCORPORATED INTO THE UNIT BID FOR THIS ITEM AND WILL NOT BE PAID FOR SEPARATELY.

ITEM 209 LINEAR GRADING

THE CONTRACTOR SHALL RE-SHAPE THE BERMS TO ENSURE A SMOOTH SURFACE FREE OF IRREGULARITIES AT LOCATIONS WHERE EXISTING GUARDRAIL IS REMOVED OR WHERE NEW GUARDRAIL IS TO BE ERECTED. THE REMOVAL AND DISPOSAL OF THE EXCESS EXCAVATED MATERIAL RESULTING FROM THIS OPERATION SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR AS DESCRIBED IN SECTION 209 AND SHALL BE INCLUDED IN THE UNIT BID PRICE PER MILE OF LINEAR GRADING.

COUNTY GUARDRAIL
SAFETY IMPROVEMENT PROJECT

OHIO
FWWA REGION 5
FEDERAL PROJECT

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ALLEN COUNTY OHIO

ITEM 614 MAINTENANCE OF TRAFFIC

TRAFFIC SHALL BE MAINTAINED AT ALL TIMES IN ACCORDANCE WITH THE PROVISIONS OF ITEM 614 OF THE SPECIFICATIONS. WHERE ALL WORK ACTIVITIES ARE CONFINED TO THE SHOULDER AND NO ENCROACHMENT INTO THE TRAVELED LANES IS NECESSARY, THE MINIMUM TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH FIGURE 6H-3 OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND STANDARD CONSTRUCTION DRAWINGS.

ANY HAZARD DURING NON-WORKING HOURS SHALL BE ADEQUATELY PROTECTED WITH DRUMS OR BARRICADES, OR AS DIRECTED BY THE ENGINEER. PAYMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN.

WHEN ANY ENCROACHMENT ON THE TRAVELED LANES IS NECESSARY, THE CONTRACTOR SHALL PLACE LANE CLOSURES OR USE FLAGGER CONTROL AS APPROPRIATE, IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND STANDARD CONSTRUCTION DRAWINGS.

WHERE MULTIPLE REPAIR LOCATIONS ARE IN SUFFICIENTLY CLOSE PROXIMITY THAT THEY CAN BE INCLUDED WITHIN ONE TRAFFIC CONTROL SET-UP, EXCEPT IF THE TOTAL AMOUNT OF WORK EXCEEDS THAT WHICH CAN BE PRACTICALLY ACCOMPLISHED DURING ONE NORMAL DAY.

SET-UP OF TRAFFIC CONTROL, MAINTENANCE OF TRAFFIC, AND REMOVAL OF THE TRAFFIC CONTROL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN.

THE USE OF ADVANCED CLOSURE SIGNS ARE NO LONGER AT THE DISCRETION OF THE ENGINEER. IF THERE IS A ROAD CLOSURE, ADVANCED CLOSURE SIGNS ARE REQUIRED. THE ADVANCED CLOSURE SIGNS MUST INCLUDE THE TELEPHONE NUMBER OF DAVE LOUTH. DAVE LOUTH'S TELEPHONE NUMBER IS (419) 996-7110.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A "W-BEAM RAIL SPLICE" AS SHOWN IN AASHTO M 180. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

GUARDRAIL POST AND GUARD POST HOLES

ALL HOLES REMAINING AFTER REMOVAL OF GUARDRAIL POSTS OR GUARD POSTS SHALL BE FILLED WITH GRANULAR MATERIAL, EXCESS MATERIAL RESULTING FROM GUARDRAIL CONSTRUCTION OR EXCESS MATERIAL FROM BERM RESHAPING. FILL MATERIAL CONTAINING SOD SHALL NOT BE USED. ALL FILL MATERIAL MUST MEET THE APPROVAL OF THE ENGINEER PRIOR TO ITS USE. MATERIAL PLACED IN HOLES SHALL BE THOROUGHLY COMPACTED AND LEVELED OFF AS DIRECTED BY THE ENGINEER. PAYMENT FOR THE ABOVE SHALL BE INCLUDED WITH THE UNIT PRICE FOR THE APPLICABLE GUARDRAIL ITEMS.

CURVED RAIL ELEMENTS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE CORRECT RADIUS REQUIRED FOR EACH INSTALLATION. THE LENGTH OF CURVED RAIL ELEMENTS SHALL BE INCLUDED IN THE TOTAL LENGTH OF THE RUN AND INCLUDED IN THE GUARDRAIL OR GUARDRAIL REBUILT ITEM FOR PAYMENT.

ALLEN COUNTY ENGINEER
BRION E. RHODES, P.E., P.S.

GENERAL NOTES
COUNTY GUARDRAIL
SAFETY IMPROVEMENT PROJECT

DRAWN BY: Z.J.G.	CHECKED BY: D.R.L.	DESIGNED BY: D.R.L.	DATE: 10-31-2016	
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REFERENCE NUMBER	PAGE ON MAP	ROAD NAME	CROSSING OR LOCATION	NORTHWEST CORNER		NORTHEAST CORNER		SOUTHEAST CORNER		SOUTHWEST CORNER		END ASSEMBLY TYPE A	END ASSEMBLY TYPE T
				COUNTY	TOWNSHIP	COUNTY	TOWNSHIP	COUNTY	TOWNSHIP	COUNTY	TOWNSHIP		
				EXISTING <small>REMOVE & REPLACE</small>	PROPOSED <small>(ADDITIONAL)</small>	EXISTING <small>REMOVE & REPLACE</small>	PROPOSED <small>(ADDITIONAL)</small>	EXISTING <small>REMOVE & REPLACE</small>	PROPOSED <small>(ADDITIONAL)</small>	EXISTING <small>REMOVE & REPLACE</small>	PROPOSED <small>(ADDITIONAL)</small>		
4	9	* ACADIA ROAD *	SOUTH OF PURDY ROAD ~ WEST SIDE	625	675	0	0	0	0	0	0	3	5
6	8	CREPS ROAD	WEST OF STATE ROUTE 117 ~ AUG-198-021	0	0	312.5	37.5	0	0	237.5	0	8	0
7	8	AMHERST ROAD	EAST OF STATE ROUTE 196 ~ AUG-205-152	87.5	0	0	0	0	0	0	0	4	0
8	6	RIDGE ROAD	AUGLAIZE RIVER	25	0	0	0	37.5	0	0	0	6	0
9	6	OLD DELPHOS ROAD	SOUTH OF RIDGE ROAD ~ WEST SIDE	150	0	0	0	0	0	0	0	2	0
10	8	RESERVOIR ROAD	EAST OF ROUSH ROAD ~ NORTH SIDE	462.5	0	0	0	0	0	0	0	2	0
11	6	WAPAK ROAD	HONEY RUN	0	0	275	0	0	0	37.5	0	6	0
30	8	THAYER ROAD	OTTAWA RIVER	0	0	250	0	0	0	250	0	6	3
33	7	PHILLIPS ROAD	RILEY CREEK	200	0	0	0	175	0	0	0	4	0
34	9	WEST UNION ROAD	JENNINGS CREEK	100	0	0	0	100	0	0	0	4	0
36	8	WONNELL ROAD	AUGLAIZE RIVER	0	0	100	0	0	0	100	0	4	0
37	8	SCHOOLER ROAD	AUGLAIZE RIVER	100	0	0	0	100	0	0	0	4	0
40	7	LINCOLN HIGHWAY	LITTLE RILEY CREEK	100	0	0	0	100	0	0	0	4	0
47	8	PHILLIPS ROAD	HOG CREEK	75	0	0	0	87.5	0	0	0	4	0
61	6	STATE ROAD	OTTAWA RIVER	462.5	0	0	0	387.5	0	0	0	4	0
70	8	PHILLIPS ROAD	NORTH OF STATE ROUTE 81~ WEST SIDE	200	0	0	0	0	0	0	0	4	0
P-75	7	PHILLIPS ROAD	INTERSTATE 75	350	0	0	0	325	0	0	0	4	0

* = 9 FOOT POSTS ARE TO BE USED ON REFERENCE NUMBER 4 (ACADIA ROAD)

GENERAL SUMMARY

COUNTY GUARDRAIL SAFETY IMPROVEMENT PROJECT		OHIO
ALLEN COUNTY OHIO		FHWA REGION 5
Computations By: Initials Date		FEDERAL PROJECT
Computations Checked By: Initials Date		

SHEET NUMBER						REFERENCE NUMBER	ITEM NUMBER	LUMP SUM QUANTITY	ESTIMATED QUANTITY	CONTINGENCY QUANTITY	GRAND TOTAL	UNITS	DESCRIPTION
6		7		8									
0.00		0.00		0.00		1	201E11000	1.00	0.00	0.00	1.00	LUMP	CLEARING & GRUBBING
2,962.50		2,225.00		3,712.50		2	202E38000	0.00	9,975.00	0.00	9,975.00	L.F.	GUARDRAIL REMOVED, AS PER PLAN
0.00		0.00		0.00		3	203E20001	0.00	0.00	50.00	50.00	C.Y.	EMBANKMENT, AS PER PLAN
0.560		0.421		0.704		4	209E98300	0.000	2.017	0.000	2.017	MILE	LINEAR GRADING
0.00		0.00		0.00		5	411E10000	0.00	0.00	50.00	50.00	C.Y.	STABILIZED CRUSHED AGGREGATE
0.00		0.00		0.00		6	601E20000	0.00	0.00	50.00	50.00	C.Y.	CRUSHED AGGREGATE SLOPE PROTECTION
2,962.50		2,225.00		3,712.50		7	606E16500	0.00	9,350.00	0.00	9,350.00	L.F.	GUARDRAIL REBUILT, TYPE 5, STD POST, AS PER PLAN
0.00		0.00		0.00		8	606E16550	0.00	1,300.00	0.00	1,300.00	L.F.	* GUARDRAIL REBUILT, TYPE 5, 9 FOOT POST, AS PER PLAN *
18.00		12.00		36.00		9	606E27800	0.00	73.00	0.00	73.00	EACH	ANCHOR ASSEMBLY REBUILT, TYPE A, AS PER PLAN
0.00		0.00		3.00		10	606E27900	0.00	8.00	0.00	8.00	EACH	ANCHOR ASSEMBLY REBUILT, TYPE T, AS PER PLAN
0.00		0.00		0.00		11	606E17901	0.00	0.00	5.00	5.00	EACH	GUARDRAIL, MISC., POST REPLACEMENT, AS PER PLAN
44.00		34.00		64.00		12	626E00101	0.00	167.00	0.00	167.00	EACH	BARRIER REFLECTOR, TYPE A2
11.00		0.00		18.00		13	SPECIAL	0.00	37.00	0.00	37.00	EACH	MAILBOX/SIGN ~ REMOVE AND RESET
658.00		495.00		825.00		14	659E10000	0.00	2,366.67	0.00	2,366.67	S.Y.	SEEDING AND MULCHING
0.064		0.044		0.075		15	659E20000	0.000	0.213	0.000	0.213	TON	COMMERCIAL FERILIZER
2.12		1.11		2.12		16	659E35000	0.00	6.39	0.00	6.39	M. GAL	WATER
0.00		0.00		0.00		17	614E11000	1.00	0.00	0.00	1.00	LUMP	MAINTAINING TRAFFIC
0.00		0.00		0.00		18	623E10000	1.00	0.00	0.00	1.00	LUMP	CONSTRUCTION LAYOUT STAKES
0.00		0.00		0.00		19	624E10000	1.00	0.00	0.00	1.00	LUMP	MOBILIZATION

* = 9 FOOT POSTS ARE TO BE USED ON REFERENCE NUMBER 4 (ACADIA ROAD)

ALLEN COUNTY ENGINEER BRION E. RHODES, P.E., P.S.				/	
<div>GENERAL SUMMARY</div> <div>COUNTY GUARDRAIL SAFETY IMPROVEMENT PROJECT</div>					
DRAWN BY: Z.J.G.	CHECKED BY: D.R.L.	DESIGNED BY: D.R.L.	DATE: 10-31-2016		

