

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

TRU-11-19.02

GREENE TOWNSHIP
GUSTAVUS TOWNSHIP
JOHNSTON TOWNSHIP

TRUMBULL COUNTY

PROJECT DESCRIPTION

REHABILITATION OF 9.45 MILES OF S.R. 11 BY PAVEMENT RESURFACING. INCLUDES MINOR BRIDGE WORK TO STRUCTURES TRU-5-2229, TRU-88-1552, TRU-11-2382, TRU-11-2485, TRU-87-1512, TRU-11-2691, TRU-11-2791.

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)

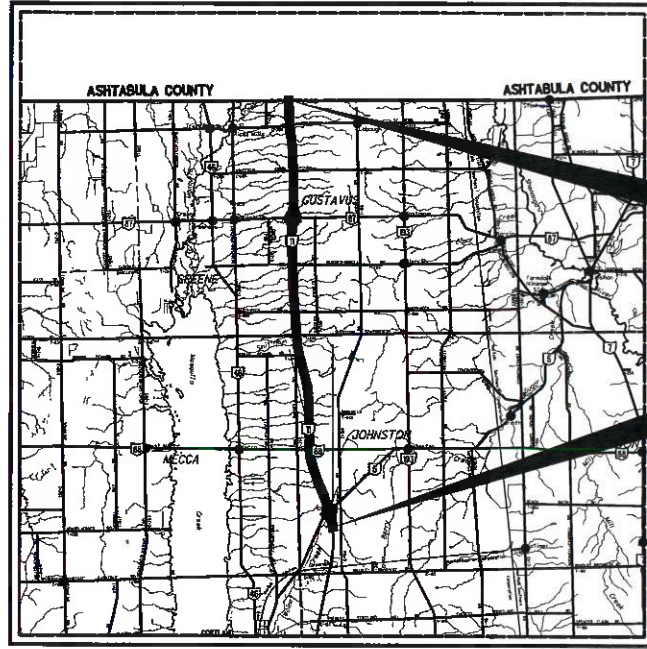
LIMITED ACCESS

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 CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

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



LOCATION MAP

LATITUDE: 41°25'52" LONGITUDE: 80°42'44"

SCALE IN MILES



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

END PROJECT
SLM: 28.47
TRU-11

BEGIN PROJECT
SLM: 19.02
TRU-11

INDEX OF SHEETS:

TITLE SHEET	1
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DESIGN DESIGNATION

DESIGN FUNCTIONAL CLASSIFICATION:
URBAN FREEWAYS & EXPRESSWAYS TRU-11 (19.02-19.66)
RURAL FREEWAYS & EXPRESSWAYS TRU-11 (19.66-28.47)
NHS PROJECT ----- YES

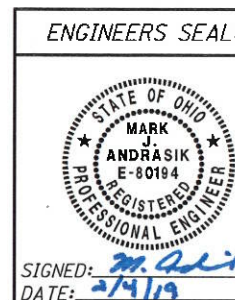
DESIGN EXCEPTIONS

NONE

Updated and added MGS SCDs



PLAN PREPARED BY:
ODOT DISTRICT 4, PLANNING & ENGINEERING
2088 S. ARLINGTON ROAD
AKRON, OH 44306



STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-3.1	1/17/20	TC-41.20	10/18/13	800	10/16/20		
BP-9.1	1/18/19	TC-42.10	10/18/13	808	1/18/19		
		TC-42.20	10/18/13	809	7/17/20		
DM-4.3	1/15/16	TC-52.10	10/18/13	821	4/20/12		
DM-4.4	1/15/16	TC-52.20	7/20/18	832	10/19/18		
		TC-65.10	1/17/14	908	10/20/17		
MT-95.30	7/19/19	TC-65.11	7/21/17	921	4/20/12		
MT-95.50	7/21/17	TC-72.20	7/20/18	875	1/18/19		
MT-98.10	1/17/20	TC-73.20	1/17/20				
MT-98.20	4/19/19						
MT-99.20	4/19/19	MGS-1.1	1/19/18				
MT-101.90	7/17/20	MGS-2.1	1/19/18				
MT-102.20	4/19/19	MGS-2.4	7/19/20				
MT-104.10	10/16/15						
MT-105.10	1/17/20						

APPROVED _____
DATE 2/4/19 DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO.
E130(851)

PID NO.
83046

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT
NONE

TRU-11-19.02

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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, THE OHIO UTILITIES PROTECTION SERVICE (OUPS), THE OHIO & GAS PROCEDURES UNDERGROUND PROTECTION SERVICE (OGPUPS), THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEAD-QUARTERS AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION IN ALL AREAS.

OUPS 1-800-362-2764 (CONTACT LIMITED BASIS PARTICIPANTS DIRECTLY)
 OGPUPS 1-800-925-0988
 ODOT 330-786-2267 MICHELLE CHANEY
 ODOT ITS - EMAIL: CEN.ITS.LAB@DOT.OHIO.GOV
 TRAFFIC MONITORING SECTION ODOT, 1980 W. BROAD ST, COLUMBUS, OH 43223
 DAN DIDDLE 614-560-9541

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.

PAVEMENT MARKING LANE WIDTHS

THE NORMAL LANE WIDTH FOR THE PAVEMENT MARKINGS ON THIS PROJECT SHALL BE AS FOLLOWS:

ROUTE	S.L.M. TO S.L.M.	LANE WIDTH
SR 11	19.02 28.47	12'

PAVEMENT MARKING DETAILS

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

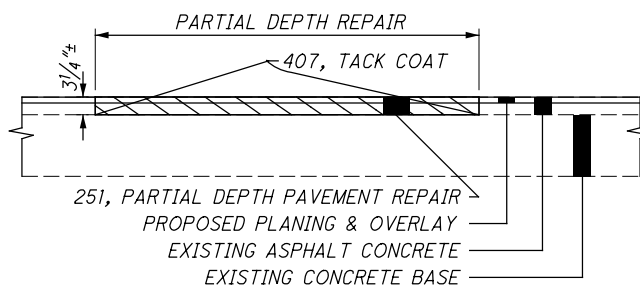
PROFILE AND ALIGNMENT

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.

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, PERFORMED BEFORE THE MAINLINE PAVEMENT PLANING. ALSO, THIS ITEM SHALL COMMENCE BEFORE 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), 15,000 SQ. YD.



ITEM 618 - RUMBLE STRIPS, (ASPHALT CONCRETE)

FOR USE ALONG SR-11 WITHIN THE PROJECT LIMITS, FROM SLM 19.02 TO SLM 28.47. OFFSET "A" AND "B" SHALL FOLLOW THE OFFSET DIMENSION TABLE AS SHOWN ON STANDARD CONSTRUCTION DRAWING B.P-9.1 FOR THIS ITEM OF WORK.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:
 ITEM 618, RUMBLE STRIPS (ASPHALT CONCRETE) 37.8 MILES

ITEM 203 - EXCAVATION (FOR PAVEMENT REPAIR)

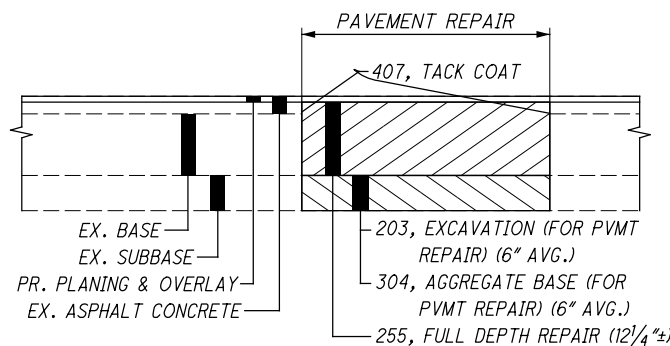
THIS ITEM OF WORK SHALL CONSIST OF REMOVING AND DISPOSING OF ALL UNSUITABLE MATERIAL BY EXCAVATING THE EXISTING SUBGRADE AND SUBBASE TO AN AVERAGE DEPTH OF 6 INCHES OR AS DIRECTED BY THE ENGINEER. EXACT LIMITS OF REMOVAL SHALL BE DETERMINED BY THE ENGINEER. ALL EQUIPMENT, LABOR, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203 EXCAVATION (FOR PAVEMENT REPAIR). THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

203, EXCAVATION (FOR PAVEMENT REPAIR), 833 CU YD

ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, CLASS RRCM

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THIS ITEM SHALL CONSIST OF CUTTING AND REMOVING DETERIORATED PAVEMENT FULL DEPTH AND PLACING 12"± FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, CLASS RRCM. THE MAXIMUM COMPACTED DEPTH OF ANY ONE LAYER SHALL BE 6 INCHES. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED BEFORE THE COMPLETION OF MAINLINE PAVEMENT PLANING. ALSO, THIS ITEM SHALL COMMENCE WITHIN 3 DAYS OF THE COMPLETION OF MAINLINE PAVEMENT PLANING. IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE ENGINEER SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REMOVED AND REPLACED TO THE LIMITS DESIGNATED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

255, FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT, CLASS RRCM, 5,000 SY
 255, FULL DEPTH PAVEMENT SAWING, 26,250 FT



ITEM 304 - AGGREGATE BASE (FOR PAVEMENT REPAIR)

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED AND SHALL BE USED AS DIRECTED BY THE ENGINEER TO BACKFILL AREAS WHICH WERE EXCAVATED UNDER ITEM 203 EXCAVATION (FOR PAVEMENT REPAIR). THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

304, AGGREGATE BASE (FOR PAVEMENT REPAIR), 833 CU YD

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 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 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446), AS PER PLAN (PG70-22M)

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.

ASPHALT GRINDINGS

THE CONTRACTOR SHALL DELIVER A MINIMUM OF 3,000 TONS OF ASPHALT GRINDINGS TO THE BELOW LOCATIONS:

ODOT D4 OUTPOST (GUSTAVUS OUTPOST)
 2979 KINSMAN ROAD, NORTH BLOOMFIELD, OHIO 44450
 JOE PARTHEMER - 330.786.4988

THIS WORK SHALL BE COORDINATED BETWEEN THE PROJECT ENGINEER, THE CONTRACTOR, AND JOE PARTHEMER. PAYMENT FOR THIS WORK WILL BE INCIDENTAL TO:

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (T=1/2")

Added Asphalt Grindings Note

CALCULATED
 CMR
 CHECKED
 MJA

GENERAL NOTES

TRU-11-19.02

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SHEET NUM.										PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
3	4	5	7	8	9					01/NHS/P V	EXT	TOTAL				
ROADWAY																
833										833	203	10000	833	CY	EXCAVATION	
EROSION CONTROL																
										3,000	832	30000	3,000	EACH	EROSION CONTROL	
PAVEMENT																
15,000										15,000	251	01000	15,000	SY	PARTIAL DEPTH PAVEMENT REPAIR (441)	
						437,074				437,074	254	01000	437,074	SY	PAVEMENT PLANING, ASPHALT CONCRETE (T=1 1/2")	
5,000										5,000	255	10500	5,000	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS RRCM	
26,250										26,250	255	20000	26,250	FT	FULL DEPTH PAVEMENT SAWING	
833										833	304	20000	833	CY	AGGREGATE BASE	
						39,337				39,337	407	20000	39,337	GAL	NON-TRACKING TACK COAT	
						19,691				19,691	408	10001	19,691	GAL	PRIME COAT, AS PER PLAN	3
						12,281				12,281	441	00100	12,281	CY	ANTI-SEGREGATION EQUIPMENT	
						18,212				18,212	442	10001	18,212	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN (PG70-22M) (T=1 1/2")	3
						2,735				2,735	617	10101	2,735	CY	COMPACTED AGGREGATE, AS PER PLAN	3
						38				38	618	40600	38	MILE	RUMBLE STRIPS, (ASPHALT CONCRETE)	3
						26,546				26,546	875	10000	26,546	LB	LONGITUDINAL JOINT ADHESIVE	
TRAFFIC CONTROL																
										1,148			1,148	EACH	RPM	
										870	621	00100	870	EACH	RAISED PAVEMENT MARKER REMOVED	
										40.8	646	10010	40.8	MILE	EDGE LINE, 6"	
										18.9	646	10110	18.9	MILE	LANE LINE, 6"	
										3,020	646	10310	3,020	FT	CHANNELIZING LINE, 12"	
										225	646	10400	225	FT	STOP LINE	
										8	646	20320	8	EACH	WRONG WAY ARROW	
										6,775	646	20504	6,775	FT	DOTTED LINE, 6"	
STRUCTURE REPAIRS																
															FOR TRU-11-2383 ESTIMATED QUANTITIES	12
															FOR TRU-11-2485 ESTIMATED QUANTITIES	12
															FOR TRU-11-2691 ESTIMATED QUANTITIES	12
															FOR TRU-11-2790 ESTIMATED QUANTITIES	12
															FOR TRU-87-1513 ESTIMATED QUANTITIES	12
MAINTENANCE OF TRAFFIC																
	200									200	614	11110	200	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
	32									32	614	12460	32	EACH	WORK ZONE MARKING SIGN	
	20									20	614	13000	20	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
		6								6	614	18601	6	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	5
	18.9									18.9	614	20010	18.9	MILE	WORK ZONE LANE LINE, CLASS I, 6"	
	18.9									18.9	614	20560	18.9	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
	40.8									40.8	614	22360	40.8	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
	3,020									3,020	614	23010	3,020	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12"	
	3,020									3,020	614	23690	3,020	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	
		24								24	808	18700	24	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	5
INCIDENTALS																
										LS	614	11000	LS		MAINTAINING TRAFFIC	
										6	619	16020	6	MNTH	FIELD OFFICE, TYPE C	
										LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
										LS	624	10000	LS		MOBILIZATION	

Added Quantity

1,148

CALCULATED CMR CHECKED MJA
GENERAL SUMMARY
TRU-11-19.02
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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

SS 856 DATED 10/20/17

DESIGN SPECIFICATIONS

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

EXISTING STRUCTURE VERIFICATION

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-87-1513 (OVER TRU-11-2588)

- REMOVE AND REPLACE EXISTING ASPHALT CONCRETE OVERLAY AND WATERPROOFING WITH NEW BRIDGE DECK WATERPROOFING ASPHALT CONCRETE AND ASPHALT CONCRETE OVERLAY
- REMOVE AND REPLACE 50 FEET OF APPROACH ASPHALT ON BOTH SIDES OF THE STRUCTURE
- REPAIR EROSION AT THE FORWARD RIGHT AND LEFT OF THE STRUCTURE
- PATCH ALL UNSOUND AREAS OF THE CONCRETE SUBSTRUCTURE AND PARAPETS, AND SEAL WITH EPOXY-URETHANE
- REMOVE ALL SPALLED AREAS FROM THE BOTTOM OF BRIDGE DECK AND SEAL WITH EPOXY-URETHANE
- CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION

TRU-11-2383 (UNDER DAVIS-PECK RD.)

- REMOVE AND REPLACE EXISTING ASPHALT CONCRETE OVERLAY AND WATERPROOFING WITH NEW BRIDGE DECK WATERPROOFING ASPHALT CONCRETE AND ASPHALT CONCRETE OVERLAY
- REMOVE AND REPLACE 50 FEET OF APPROACH ASPHALT ON BOTH SIDES OF THE STRUCTURE
- REPAIR EROSION AT THE FORWARD RIGHT OF THE STRUCTURE
- REPLACE THE EXISTING APPROACH GUARDRAIL
- CLEAN OUT EXISTING SCUPPERS
- CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION

TRU-11-2485 (UNDER GARDNER BARCLAY RD.)

- REMOVE AND REPLACE EXISTING ASPHALT CONCRETE OVERLAY AND WATERPROOFING WITH NEW BRIDGE DECK WATERPROOFING ASPHALT CONCRETE AND ASPHALT CONCRETE OVERLAY
- REMOVE AND REPLACE 50 FEET OF APPROACH ASPHALT ON BOTH SIDES OF THE STRUCTURE
- REPAIR EROSION AT THE FORWARD & REAR CONCRETE POST ANCHORS
- REPLACE THE EXISTING APPROACH GUARDRAIL
- CLEAN OUT EXISTING SCUPPERS
- CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION

TRU-11-2691 (UNDER WAKEFIELD CREEK RD.)

- REMOVE AND REPLACE EXISTING ASPHALT CONCRETE OVERLAY AND WATERPROOFING WITH NEW BRIDGE DECK WATERPROOFING ASPHALT CONCRETE AND ASPHALT CONCRETE OVERLAY
- REMOVE AND REPLACE 50 FEET OF APPROACH ASPHALT ON BOTH SIDES OF THE STRUCTURE
- REPAIR EROSION AT THE FORWARD AND REAR RIGHT OF THE STRUCTURE
- REPLACE THE EXISTING APPROACH GUARDRAIL
- CLEAN OUT AND EXTEND EXISTING SCUPPERS
- CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION

TRU-11-2790 (UNDER YORK STREET)

- REMOVE AND REPLACE EXISTING ASPHALT CONCRETE OVERLAY AND WATERPROOFING WITH NEW BRIDGE DECK WATERPROOFING ASPHALT CONCRETE AND ASPHALT CONCRETE OVERLAY
- REMOVE AND REPLACE 50 FEET OF APPROACH ASPHALT ON BOTH SIDES OF THE STRUCTURE
- REPAIR EROSION AT THE FORWARD LEFT OF THE STRUCTURE
- REPLACE THE EXISTING APPROACH GUARDRAIL
- CLEAN OUT AND EXTEND EXISTING SCUPPERS
- CLEARING AND GRUBBING 15' AROUND STRUCTURE TO REMOVE ALL VEGETATION

BRIDGE TERMINAL ASSEMBLY, TYPE 2, AS PER PLAN

THE CONTRACTOR SHALL INSTALL BRIDGE TERMINAL ASSEMBLIES TYPE 2 AS SHOWN ON PAGE 7/8. THE BRIDGE TERMINAL ASSEMBLIES SHALL INCLUDE ADDITIONAL POSTS AT THE SECOND AND THIRD BAYS (FROM THE PARAPET) WITH EQUAL SPACING BETWEEN THE ADDITIONAL POSTS AND THE SURROUNDING POSTS. THESE BRIDGE TERMINAL ASSEMBLIES SHALL ALSO INCLUDE EXTRA W-BEAM AS SHOWN ON SECTION A-A OF STANDARD CONSTRUCTION DRAWING MGS-2.4 FOR A LENGTH OF 25 FEET STARTING AT THE BRIDGE PARAPET.

Added Note

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.

ITEM 202 - WEARING COURSE REMOVED, AS PER PLAN

REMOVE ALL OF THE ASPHALT CONCRETE ON ALL STRUCTURE(S) FOR THIS PROJECT. THICKNESS VARIES WITH A MINIMUM THICKNESS OF 3". MILLING OR OTHER MECHANICAL METHOD OF ASPHALT DECK REMOVAL MAY BE PERFORMED TO WITHIN 1/2" OF THE TOP OF THE ORIGINAL BRIDGE DECK SURFACE. THE LAST 1/2" 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 ORIGINAL BRIDGE DECK SURFACE. ANY DAMAGE TO THE ORIGINAL DECK SURFACE 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.

SPECIAL - STRUCTURES: CONCRETE SPALL REMOVAL

THIS WORK WILL CONSIST OF REMOVING ALL VISIBLY SPALLED AREAS OF THE BOTTOM DECK FLOOR OF STRUCTURES TRU-5-2229 AND TRU-87-1513 WITHOUT SOUNDING. AFTER SPALLED CONCRETE AREAS HAVE BEEN REMOVED, REMOVAL AREAS WILL BE SEALED WITH ITEM 512, SEALING OF CONCRETE SURFACES (EPOXY - URETHANE).

CONCRETE SPALL REMOVAL WILL BE PAID FOR AT THE UNIT BID PRICE FOR SPECIAL - STRUCTURE MISC.: CONCRETE SPALL REMOVAL. THIS PRICE WILL INCLUDE THE COST OF LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

TRU-87-1513
SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), 15 SQ YD
SPEC, STRUCTURES: CONCRETE SPALL REMOVAL, 15 SQ YD

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN (PG70-22M)

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 518 - SCUPPER, MISC.: CLEANOUT

THIS WORK WILL CONSIST OF REMOVING ALL DEBRIS FROM ON TOP AND INSIDE OF THE SCUPPERS. SCUPPER CLEANOUT WILL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM 518, SCUPPER MISC.: CLEANOUT. THIS PRICE WILL INCLUDE THE COST FOR LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

ITEM 518 - SCUPPER, LENGTHENING, AS PER PLAN

THIS WORK WILL CONSIST OF EXTENDING ALL EXISTING SCUPPERS OF STRUCTURES TRU-11-2691 AND TRU-11-2791 TO A MINIMUM OF 8" BELOW THE EXISTING STEEL BEAMS.

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 EACH FOR ITEM 618, SCUPPER, LENGTHENING, 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.

BARRIER REFLECTORS

THE FOLLOWING ESTIMATED QUANTITY WILL BE USED AT LOCATIONS AS DIRECTED BY THE ENGINEER FOR INSTALLING BARRIER REFLECTORS ON THE EXISTING BARRIER RUNS.

626, BARRIER REFLECTOR, TYPE 1, BIDIRECTIONAL, 30 EACH

EROSION REPAIR

THE FOLLOWING QUANTITIES FOR THE STRUCTURES LISTED BELOW SHALL BE USED TO REPAIR THE EROSION ON THE RIGHT AND LEFT SIDES OF THE FORWARD AND REAR APPROACH FOR EACH STRUCTURE.

TRU-87-1513
ITEM 203, BORROW, 5 CU YD
ITEM 601, DUMPED ROCK FILL, TYPE C, 5 CU YD

TRU-11-2383
ITEM 203, BORROW, 5 CU YD
ITEM 601, DUMPED ROCK FILL, TYPE C, 5 CU YD

TRU-11-2485
ITEM 203, BORROW, 5 CU YD
ITEM 601, DUMPED ROCK FILL, TYPE C, 5 CU YD

TRU-11-2691
ITEM 203, BORROW, 5 CU YD
ITEM 601, DUMPED ROCK FILL, TYPE C, 5 CU YD

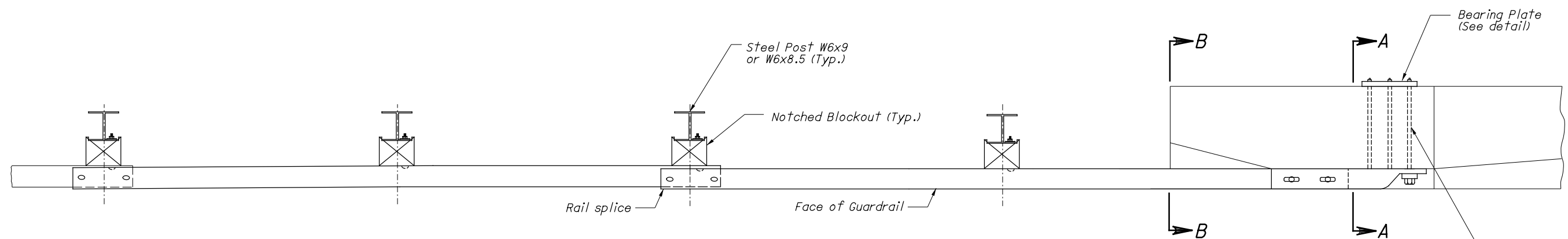
TRU-11-2790
ITEM 203, BORROW, 5 CU YD
ITEM 601, DUMPED ROCK FILL, TYPE C, 5 CU YD

DESIGN AGENCY	ODOT --- DISTRICT 4
DATE	12/14/18
REVIEWED	RS
DRAWN	CMR
DESIGNED	CMR
CHECKED	MJA
REVISIONS	CMR
STRUCTURE GENERAL NOTES	TRU-11-2382, TRU-11-2485, TRU-11-2691, TRU-11-2791, TRU-5-2229, TRU-87-1512, TRU-88-1552, UNDER DAVIS-PECK RD., GARDNER BARCLAY RD., WAKEFIELD CREEK RD., YORK ST., OVER TRU-11-1937, TRU-11-2588, TRU-11-2080
TRU-11-19.02	PID No. 83046
1 / 8	10 / 17

TRU-11-2383 7808429 02/NHS/BR	TRU-11-2485 7808461 02/NHS/BR	TRU-87-1513 7805535 02/NHS/BR	TRU-11-2691 7808518 02/NHS/BR	TRU-11-2790 7808550 02/NHS/BR				ITEM	EXTENSION	UNIT	DESCRIPTION	SEE SHEET
LUMP	LUMP	LUMP	LUMP	LUMP				201	11000		CLEARING AND GRUBBING	1/10
1427	1427	1759	1427	1759				202	23501	SY	WEARING COURSE REMOVED, AS PER PLAN	1/10
1925	1587.5		1650	3162.5				202	38000	FT	GUARDRAIL REMOVED	4/10
70	62.5	5	62.5	112.5				203	40000	CY	BORROW	
194	194	238	194	238				407	20000	GAL	NON-TRACKING TACK COAT	
60	60	74	60	74				441	50101	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN (PG70-22M)	1/10
		43						512	10100	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
8	8	8	8	8				518	12500	EACH	SCUPPER, MISC.: CLEANOUT	1/10
			8	8				518	12901	EACH	SCUPPER, LENGTHENING, AS PER PLAN	
		250						519	11101	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	1/10
		15						SPECIAL	53000800	SY	STRUCTURES CONCRETE SPALL REMOVAL	1/10
5	5	5	5	5				601	27000	CY	DUMPED ROCK FILL, TYPE C	
100	100		100	100				606	13000	FT	GUARDRAIL, TYPE 5	4/10
1537.5	1287.5		1387.5	2900				606	15100	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	4/10
5	4		3	2				606	26150	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	4/10
3			1	5				606	26550	EACH	ANCHOR ASSEMBLY, MGS TYPE T	4/10
4	4		4	4				606	35101	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 2, AS PER PLAN	4/10
6	6	6	6	6				626	00102	EACH	BARRIER REFLECTOR, TYPE 1, BIDIRECTIONAL	1/10
22	18		17	32				626	00110	EACH	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	4/10
46	46		46	46				630	03100	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
12	12		12	12				630	80100	SF	SIGN, FLAT SHEET	
3	1		4	2				630	84900	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
3	1		4	2				630	86002	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
858	759		726	1419				659	10000	SY	SEEDING AND MULCHING	4/10
0.26	0.23		0.23	0.43				659	20000	TON	COMMERCIAL FERTILIZER	4/10
0.26	0.23		0.23	0.43				659	31000	ACRE	LIME	4/10
5.2	4.6		4.6	8.6				659	35000	MGAL	WATER	4/10
44	44	54	44	54				856	10000	CY	BRIDGE DECK WATERPROOFING ASPHALT CONCRETE	
Removed Polymer Modified Asphalt Expansion Joint System												

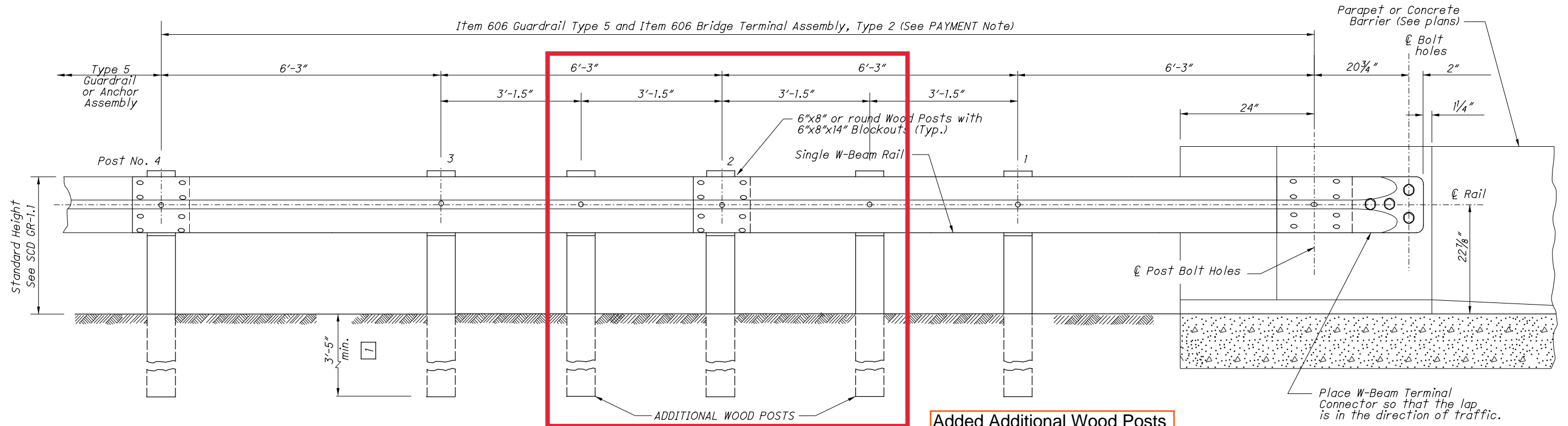
added "As Per Plan"

I:\ProjectData\TRU\83046_11_18.94\Design\Structures\TRU011_2382C\Sheets\B3046_BTA_Type2.dgn_Sheet 11/25/2020 11:33:11 AM cres



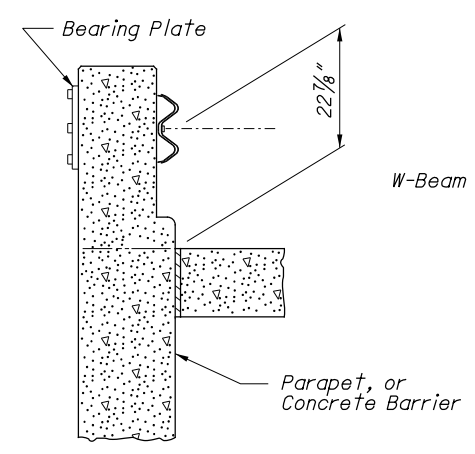
PLAN (Steel Posts shown. See POSTS Note.)

7/8" dia. ASTM A 325 through bolts (length to be determined in field in accordance with Parapet width) into Bearing Plate with standard washers and hex nuts

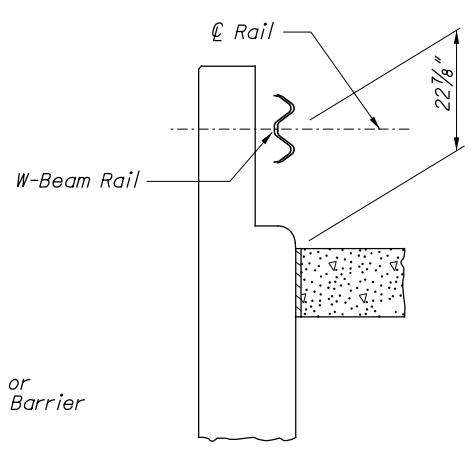


ELEVATION (Wood Posts shown. See POSTS Note.)

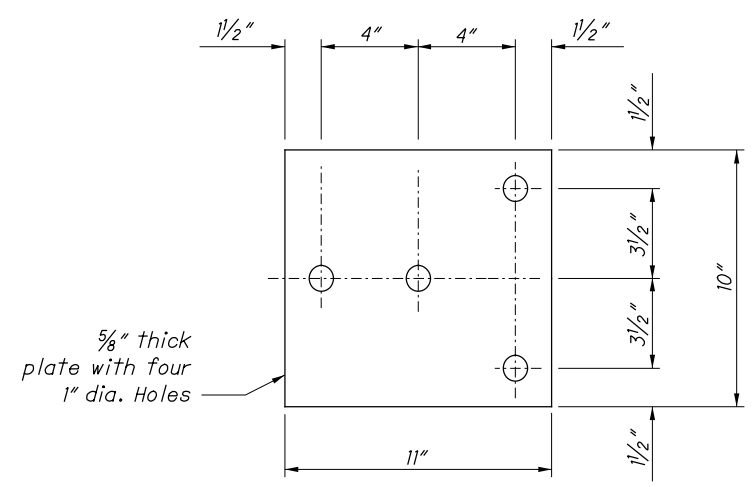
Added Additional Wood Posts



SECTION A-A



SECTION B-B



BEARING PLATE

NOTES

- GENERAL:** For additional rail and post details, see SCD GR-1.1.
- APPLICATION:** Use Type 2 Bridge Terminal Assembly to connect guardrail runs to the trailing end of Parapets or Concrete Barriers (see SCD RM-4.6 for barrier) on one-directional roadways. Do not use if located within clear zone of opposing traffic.
- POSTS:** Posts shall be of standard size and material specified for the appropriate type of guardrail to be installed leaving the bridge or barrier. For Type 5 guardrail, see SCD GR-2.1.
- BLOCKOUTS:** Wood or plastic blockouts are permitted.
- FLARED GUARDRAIL:** Begin Standard Guardrail Flares as shown on SCD GR-5.1, preferably at or beyond Post No. 4, however, the flare may begin at Post No. 2.
- PAYMENT:** Item 606 - Bridge Terminal Assembly, Type 2, Each, includes the cost of extra components, in excess of normal guardrail for the Terminal connector, Bearing Plates, bolts, washers, nuts, and other hardware.