

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

ASD MOHICAN SP STRUCTURES

HANOVER TOWNSHIP ASHLAND COUNTY

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PROJECT DESCRIPTION

PAVEMENT MARKING ON ROADS NO. R-20, R-51, R-53, R-58 AND R-63 AND PARKING LOT F-57. CONCRETE OVERLAY, ROCK CHANNEL PROTECTION, NEW APPROACH SLABS, BACKWALL REPAIR, SEALING AND PAINTING AT COVERED BRIDGE. CONCRETE OVERLAY, SEALING AND ROCK CHANNEL PROTECTION AT CAMPGROUND BRIDGE.

PROJECT EARTH DISTURBED AREA:

ESTIMATED CONTRACTOR EARTH DISTURBED AREA:

N/A (MAINTENANCE PROJECT)

NOTICE OF INTENT EARTH DISTURBED AREA:

N/A (MAINTENANCE PROJECT)

N/A (MAINTENANCE PROJECT)

2008 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 APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC ON ROAD R-53 AND R-58. THE REMAINING ROADS SHALL REMAIN OPEN. SEE MAINTENANCE OF TRAFFIC NOTES FOR CLARIFICATION.

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG

CALL

1-800-362-2764

(TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS PROTECTIVE
SERVICE CALL: 1-800-925-0988

NONE REQUIRED (ODNR PROJECT)

PLAN PREPARED BY:

ODOT DISTRICT 3 - OFFICE OF PRODUCTION

906 NORTH CLARK STREET

ASHLAND, OHIO 44805

ENGINEERS SEAL:	STAN	WINGS	SUPPLEMENTAL SPECIFICATIONS			
MINIMULATE OF OHIM	AS-1-81 EXJ-2-81	7/19/02	MT-97.10 MT-99.20 MT-101.60	4/17/09 1/16/09 4/17/09	800 802 832	1/15/10 1/16/09 5/05/09
DAVID C. MOLLENSHOTT	BP-3.1 BP-5.1	10/19/07 7/28/00	MT-105.10	1/16/09	839 847 902	4/20/07 10/16/09 10/20/08
MOLLENSHOTT: E-50210 CONSTERNING	CB-2.2 DM-1.1 DM-1.4	7/15/05 4/21/06 4/21/06	TC-41.20 TC-42.10 TC-42.20	1/19/01 1/19/07	939	4/18/08
THESSIONAL ENGINITIES	DM-4.3 DM-4.4	4/17/09	TC-52.10 TC-52.20 TC-73.10	7/16/04 1/19/07 1/19/07 1/19/01	SPE	
SIGNED: David C. Mollemhott DATE: 12/14/09					NWP #3	1/29/10

DATE 12/7/09 CHIEF ENGINEER, DEPARTMENT OF NATURAL RESQUECES

APPROVED DISTRICT DEPUTY DIRECTOR

APPROVED

DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

28

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

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATION FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICALS, 2002, INCLUDING THE 2003, 2004, 2005 AND 2006 SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN DATA:

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CONCRETE CLASS C - COMPRESSIVE STRENGTH 4,000 PSI CONCRETE CLASS S - COMPRESSIVE STRENGTH 4,500 PSI

EXISTING PLANS:

THE ORIGINAL CONSTRUCTION PLANS OF THE EXISTING BRIDGES ARE AVAILABLE UPON REQUEST AT THE DISTRICT 3 OFFICE OF THE OHIO DEPARTMENT OF TRANSPORTATION, ASHLAND, OH. OR AT FTP://FTP.DOT.STATE.OH.US/PUB/DISTRICTS/D03/83601/EXISTINGPLANS/

DECK PROTECTION METHOD:

MICRO SILICA MODIFIED CONCRETE OVERLAY

UTILITY LINES:

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

ELECTRIC: ODNR. MOHICAN STATE PARK

3116 S.R. 3

LOUDONVILLE, OHIO 44842

(419) 994-5125

ODNR, MOHICAN STATE PARK

3116 S.R. 3

LOUDONVILLE, OHIO 44842

(419) 994-5125

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.

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.

PLACING ASPHALT CONCRETE FEATHERING ON APPROACHES TO BRIDGES:

SPECIAL CARE SHALL BE TAKEN, WHEN PLACING THE ASPHALT CONCRETE TO EFFECT A SMOOTH TRANSITION FROM THE EXISTING APPROACH PAVEMENT TO THE BRIDGE DECK. THE CONTRACTOR'S ATTENTION IS CALLED TO STANDARD DRAWING BP-3.1 FOR REQUIRED TOLERANCES.

CUT LINE CONSTRUCTION JOINT PREPARATION:

SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL IN PLACE. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH, BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN:

THESE ITEMS SHALL BE USED AT LOCATIONS IN THE PLAN.

THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF THE HAMMER SHALL BE APPROVED BY THE ENGINEER.

THE EXISTING REINFORCING STEEL SHALL BE PRESERVED AS INDICATED IN THE PLANS. EXISTING CONCRETE SHALL BE REMOVED IN A MANNER THAT WILL NOT CUT. ELONGATE, OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS NO HEAVIER THAN 90 POUND CLASS.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR THE ABOVE ITEM. WHICH WILL INCLUDE ALL LABOR. EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 407 - TACK COAT:

ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE:

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. FOR ESTIMATING PURPOSES ONLY, THE PLAN QUANTITY INDICATE AN AVERAGE RATE OF:

407. TACK COAT 0.08 GAL./SY. 407, TACK COAT FOR INTERMEDIATE COURSE 0.04 GAL./SY.

ELEVATION DATUM

ALL ELEVATIONS ARE ORTHOMETRIC HEIGHTS USING THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND THE GEOIDO3 GEOID. HORIZONTAL POSITIONS ARE BASED ON THE OHIO STATE PLANE NORTH ZONE, A LAMBERT CONFORMAL CONIC MAP PROJECTION, THE NORTH AMERICAN DATUM OF 1983 ADJUSTED TO THE NATIONAL SPATIAL REFERENCE SYSTEM OF 2007 (NAD 83 (NSRS 2007)), AND THE GRS80 ELLIPSOID.

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REQUIREMENTS OF 442 APPLY EXCEPT AS FOLLOWS: MIX DESIGN: FOR Ndes USE 50 GYRATIONS. FOR Nmax USE 75 GYRATIONS. USE A PG 64-22 BINDER. MAXIMUM RECLAIMED ASPHALT CONCRETE PAVEMENT IS 30 PERCENT. DO NOT APPLY TABLE 442.02-1 EXCEPT SAND EQUIVALENT OF 45 APPLIES. APPLY 703.05 FOR COURSE AND FINE AGGREGATE EXCEPT GRADATION FOR FINE AGGREGATE DOES NOT APPLY. QUALITY CONTROL: DO NOT PERFORM Nmax IN QUALITY CONTROL TESTING. DO NOT TAKE EXTRA ASPHALT BINDER SAMPLES AS OUTLINED IN CMS 442.05.

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (448), AS PER PLAN

REQUIREMENTS OF 442 APPLY EXCEPT AS FOLLOWS: MIX DESIGN: FOR Ndes USE 50 GYRATIONS, FOR Nmax USE 75 GYRATIONS. MINIMUM TOTAL PG BINDER CONTENT IS 6.0 PERCENT. USE A PG 64-22 BINDER. MAXIMUM RECLAIMED ASPHALT CONCRETE PAVEMENT IS 20 PERCENT. WHEN AN AGGREGATE SOURCE IS SPECIALLY DESIGNATED WITH AN SR ON THE AGGREGATE SOURCE GROUP LIST DO NOT USE THE AGGREGATE EXCEPT AS ALLOWED FOR LIGHT TRAFFIC IN THE GUIDELINES FOR MAINTAINING ADEQUATE PAVEMENT FRICTION IN SURFACE PAVEMENT. QUALITY CONTROL: DO NOT PERFORM Nmax IN QUALITY CONTROL TESTING. DO NOT TAKE EXTRA ASPHALT BINDER SAMPLES AS OUTLINED IN CMS 442.05.

ITEM 511 - CLASS S CONCRETE, MISC.: CURB REPAIR ITEM 511 - CLASS C CONCRETE, ABUTMENT, AS PER PLAN: (REPAIR)

THE COARSE AGGREGATE SHALL BE LIMESTONE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR THE ABOVE ITEM WHICH SHALL INCLUDE ALL LABOR. EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM SPECIAL - BRIDGE DECK GROOVING:

THE BRIDGE DECK GROOVING SHALL MEET CMS 511.20.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID FOR THE ABOVE ITEM WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 514 -FIELD PAINTING STRUCTURAL STEEL, FINISH COAT:

THE URETHANE FINISH COAT SHALL BE DARK BROWN IN COLOR AMD MATCH FEDERAL STANDARD COLOR FS-595B, 20100.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID FOR THE ABOVE ITEM WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 516 - JOINT SEALER, AS PER PLAN:

THE COST TO SAW CUT A 1/2" WIDE GROOVE OVER THE JOINT AT THE APPROACH SLAB TO DECK LOCATION SHALL BE INCLUDED IN THIS ITEM.

THE JOINT MATERIAL SHALL MEET 705.04.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER FOOT FOR THE ABOVE ITEM WHICH SHALL INCLUDE ALL LABOR. EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 516 - STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC COMPRESSION SEAL. AS PER PLAN:

THIS ITEM SHALL BE USED TO INSTALL A NEW COMPRESSION JOINT. THE COST OF TRIMMING AND GRINDING THE EXISTING ANGLE, WELDING THE NEW PLATE TO THE EXISTING ANGLE IS INCLUDED IN THIS ITEM.

SEE SHEETS 26-28 AND STANDARD DRAWING EXJ-2-81 FOR DETAILS.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER FOOT FOR THE ABOVE ITEM WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 517 - RAILING MISC .: A588 STEEL ANGLES

THIS ITEM SHALL BE USED TO INSTALL THE PROPOSED RAILING AND POSTS AT THE LOCATIONS AND AS PER DETAILS ON SHEETS 10-13 IN THE PLAN.

THE STEEL POSTS AND RAILING SHALL BE A588 STEEL.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER FOOT OF THE ABOVE ITEM WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 642 - TRANSVERSE/DIAGONAL LINE, TYPE I, AS PER PLAN:

THE TRANSVERSE LINE SHALL BE SOLID 4 INCHES IN WIDTH AND PLACED OVER THE EXISTING LINES AT THE LOCATIONS SHOWN IN THE PLAN.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER FOOT OF THE ABOVE ITEM WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 847 - MICRO SILICA MODIFIED CONCRETE OVERLAY, AS PER PLAN (11/4" THICK):

ITEM 847 - MICRO SILICA MODIFIED CONCRETE OVERLAY, AS PER PLAN (21/4" THICK):

ITEM 847 - MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), AS PER PLAN:

THE COARSE AGGREGATE SHALL BE LIMESTONE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR THE ABOVE ITEMS WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 609 - CURB, TYPE 4-A, AS PER PLAN:

THIS ITEM SHALL BE USED TO CONSTRUCT THE PROPOSED CURB ON THE APPROACH SLABS AS PER THE DETAILS AND LOCATIONS SHOWN ON SHEETS 10-11 IN THE PLAN.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER FOOT FOR THE ABOVE ITEM WHICH SHALL INCLUDE ALL LABOR. EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

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SCENIC RIVER COMMITMENTS

IDLE EQUIPMENT, PETROCHEMICALS AND TOXIC/HAZARDOUS MATERIALS SHALL NOT BE STORED IN THE FLOODPLAIN OR NEAR ANY DRAINAGE WAYS, DITCHES OR STREAMS THAT COULD CONVEY SUCH MATERIALS TO THE CLEAR FORK, MOHICAN STATE SCENIC RIVER. PETROCHEMICALS AND TOXIC/HAZARDOUS MATERIALS SHALL NOT BE DISCHARGED INTO THE CLEAR FORK, MOHICAN STATE SCENIC RIVER, ITS FLOODPLAIN OR ANY DRAINAGE WAYS, DITCHES OR STREAMS. REFUELING OF EQUIPMENT SHALL NOT OCCUR IN THE FLOODPLAIN OR NEAR ANY DRAINAGE WAYS, DITCHES OR STREAMS. A SPILL CONTAINMENT AND CLEANUP PLAN SHALL BE GENERATED PRIOR TO THE START OF THE PROJECT.

ALL IN-STREAM WORK SHALL BE CONDUCTED DURING LOW FLOW PERIOD (AUGUST 1 THROUGH OCTOBER 31). ANY DISTURBED AREAS IN THE STREAM BOTTOM SHALL BE RETURNED TO PRE-CONSTRUCTION CONTOURS. STREAM BOTTOM ELEVATIONS SHALL BE DETERMINED BEFORE IN-STREAM WORK COMMENCES TO ENSURE THAT ALL FILL MATERIAL AND DEBRIS IS COMPLETELY REMOVED BEFORE CONSTRUCTION IS COMPLETED.

IF DEWATERING IS NECESSARY TO FACILITATE IN-STREAM WORK OR PIER CONSTRUCTION, ALL WASTEWATER SHALL BE PUMPED ONTO A VEGETATED AREA A SUFFICIENT DISTANCE FROM THE CLEAR FORK, MOHICAN STATE SCENIC RIVER TO ALLOW FOR COMPLETE INFILTRATION. NO WASTEWATER OF ANY KIND SHALL BE DISCHARGED DIRECTLY INTO THE CLEAR FORK, MOHICAN STATE SCENIC RIVER OR ANY OTHER DRAINAGE WAYS, DITCHES OR STREAMS. ALL STORM WATER DRAINAGE SHALL BE DIRECTED ONTO A VEGETATED AREA TO ALLOW FOR COMPLETE INFILTRATION. IF DISCHARGE TO A VEGETATED AREA IS NOT FEASIBLE, THEN WASTEWATER SHALL BE DISCHARGED INTO A SEDIMENT FILTER BAG OR INTO A TEMPORARY DETENTION/RETENTION POND WITH SUFFICIENT RETENTION TIME TO PERMIT FOR THE SETTLING OF ALL SUSPENDED SOLIDS.

ENVIRONMENTAL COMMITMENTS

ANY UNAVOIDABLE CUTTING OF TREES WITH SUITABLE ROOSTING AND BROOD-REARING HABITAT FOR THE INDIANA BAT (LIVING OR STANDING DEAD TREES OR SNAGS WITH EXFOLIATING, PEELING OR LOOSE BARK, SPLIT TRUNKS AND/OR BRANCHES, OR CAVITIES) WILL BE PERFORMED ONLY BEFORE APRIL 15TH OR AFTER SEPTEMBER 15TH WHEN THE SPECIES WOULD NOT BE USING SUCH HABITAT.

DECK MATERIALS AND OTHER DEBRIS WILL BE KEPT OUT OF THE RIVER IN ACCORDANCE WITH ODOT'S CMS MANUAL, SECTION 105.

THIS PROJECT LIES WITHIN THE RANGE OF THE EASTERN HELLBENDER, A FEDERALLY ENDANGERED SPECIES. THE CONTRACTOR WILL AVOID ENTERING THE STREAM BEYOND THE LIMITS OF THE ROCK CHANNEL PROTECTION AND BEST MANAGEMENT PRACTICES WILL BE IMPLEMENTED TO AVOID SEDIMENTATION IMPACTS TO THE CLEAR FORK OF THE MOHICAN RIVER.

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										-								ROADWAY	
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			424							1				202	30000	424	SQ FT	WALK REMOVED	
			118			1								202	32000	118	FT	CURB REMOVED	
			35											202	35100	35	FT	PIPE REMOVED, 24" AND UNDER	
			3											202	58100	3	EACH	CATCH BASIN REMOVED	
													213	203	10000	213	CU YD	EXCAVATION	
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													6	659	14000	6	SQ YD	REPAIR SEEDING AND MULCHING	
													6	659	15000	6	SQ YD	INTER-SEEDING	
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-			-											832	30000	2000	EACH	EROSION CONTROL	
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-										+								DNAINAGE	
+			53							+				603	00900	53	FT	6" CONDUIT, TYPE B, 707.33	
+			45											603	04400	45	FT	12" CONDUIT, TYPE B, 707.33	
			10											603	07400	10	FT	18" CONDUIT, TYPE B, 707.33	
			2											604	00800	2	EACH	CATCH BASIN, NO. 3A	
			1											604	36600	1	EACH	PRECAST REINFORCED CONCRETE OUTLET	
			66											839	30100	66	FT	TRENCH DRAIN WITH PEDESTRIAN GRATE	
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-									-	-				05.4		204	22.11	PAVEMENT	
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+										_			/3	304	20000	/3	COTO	AGGNEGATE BASE	_
			+		_	1	1	23		+			26	407	10000	49	GALLON	TACK COAT	_
								+					13	407	14000	13	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
								8					11	442	10501	19	CU YD	ASPHALT CONCRETE SURFACE COURSE, 9.5MM, TYPE A (448), AS PER PLAN	3
													16	442	20201	16	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448), AS PER PLAN	4
			60											609	24001	60	FT	CURB, TYPE 4-A, AS PER PLAN	4
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+																		TRAFFIC CONTROL	
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\top					1	300		1	+	1				642	01200	300	FT	PARKING LOT STALL MARKING, TYPE 1	-
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						0.01	0.06							646	10000	0.07	MILE	EDGE LINE	
				0.04		0.01	0.03							646	10200	0.08	MILE	CENTER LINE	

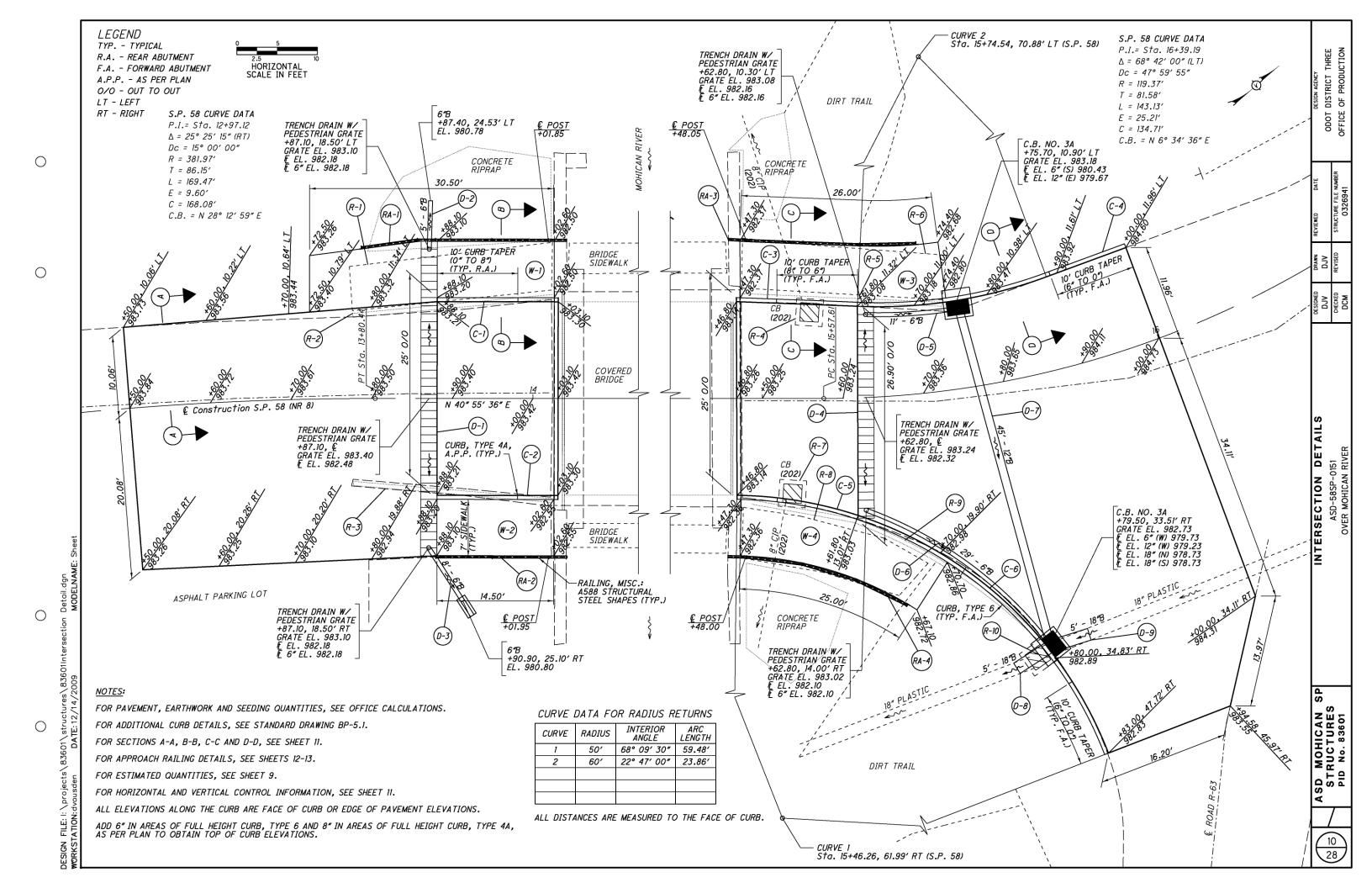
		SHEET NUMBER							ITEM ITEM		GRAND	UNIT	DESCRIPTION	SEE	디칠 등					
5	6	9		14	15	16	17	18	21	23	24	25	OFFICE CALCS		EXT.	TOTAL			NO.	CALC
																		STRUCTURES (OVER 20')		_
						-												STRUCTURE ASD-20SP-0085 (CAMPGROUND BRIDGE) (S.F.N. 0326437)	+	1
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					-			462 100						SPECIAL 512	51160000 10050	462 100	SQ YD SQ YD	BRIDGE DECK GROOVING SEALING OF CONCRETE SURFACES (NON-EPOXY)	4	-
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								LUMP						847	30000	LUMP		TEST SLAB]
					ļ	1		2						847	30200	2	CU YD	FULL DEPTH REPAIR		4
																		STRUCTURE ASD-58SP-0151 (COVERED BRIDGE) (S.F.N. 0326941)	+	+
									0.5			13.9		202	11301	14.4	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	3]
					-	-						1089		509	10000	1089	POUND	EPOXY COATED REINFORCING STEEL		4
<u> </u>						+	-					34		510	10000	34	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	+-	+
									0.5			0.2		511	34450	0.7	CU YD	CLASS S CONCRETE, MISC.: CURB REPAIR	4	1
												12.2		511	45701	12.2	CU YD	CLASS C CONCRETE, ABUTMENT, AS PER PLAN (REPAIR)	4	1
									378					SPECIAL	51160000	378	SQ YD	BRIDGE DECK GROOVING	4]
										264					*****	264		0544 NO. 05. 00400575 0405 1050 MIGH 500444		4
										204	1153			512 514	10050 00050	264 1153		SEALING OF CONCRETE SURFACES (NON-EPOXY) SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL		+
					1	1					1153			514 514	00056	1153		FIELD PAINTING OF EXISTING STRUCTURAL STEEL. PRIME COAT	+	1
]
					-	-					1153			514	00060	1153	SQ FT	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT		4
					-						1153 2			514 514	00066 0050 4	1153 2	SQ FT MAN HOUR	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL	+	+
											2			514	10000	2	EACH	FINAL INSPECTION REPAIR		1
																				1
		22.25										53		<i>516</i>	10501	53	<i>FT</i>	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC COMPRESSION SEAL, AS PER PLAN	4	4
		88.25			-								84	517 526	76300 10000	88.25 84	FT SQ YD	RAILING MISC.: A588 STEEL ANGLES REINFORCED CONCRETE APPROACH SLABS (T=12")	4	+
,					1								04	320	10000	04	30 10	NEIN ONCED CONCRETE ATTROACTI SEADS (T-127)		1
									378					847	10001	378	SQ YD	MICRO SILICA MODIFIED CONCRETE OVERLAY, AS PER PLAN (11/4" THICK)	4	1
<u> </u>									5					847	20001	5	CU YD	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), AS PER PLAN	4	4
					-	1			LUMP					847	30000	LUMP		TEST SLAB	-	4
																		MAINTENANCE OF TRAFFIC		1
]
	LUMP				-	-								615	10000	LUMP	00.45	ROADS FOR MAINTAINING TRAFFIC		4
	40				+	+								615	25000	40	SQ YD	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B		╁
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LUMP					<u> </u>									614	11000	LUMP		MAINTAINING TRAFFIC		┤:
<u> </u>					 									619 623	16000 10000	3 LUMP	MONTH	FIELD OFFICE, TYPE A CONSTRUCTION LAYOUT STAKES		۱.
														624	10000	LUMP		MOBILIZATION		۱,
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202 517 601 603 604 608 609 839 CATCH BASIN REMOVED 34 PRECAST REINFORCED CONCRETE OUTLET TRENCH DRAIN WITH PEDESTRIAN GRATE 4" CONCRETE WALK RAILING MISC.: A588 STEEL ANGLES CURB, TYPE 4-4, AS PER PLAN PIPE REMOVED, 24" AND UNDER TIED CONCRETE BLOCK MAT, TYPE CATCH BASIN, NO. 12" CONDUIT, TYPE B, 707.33 CURB REMOVED 18" CONDUIT, TYPE B, 707.33 6" CONDUIT, TYPE B, 707.33 CURB, TYPE REF SHEET STATION SIDE NO. NO. то SQ FT FROM FT FT EACH FT SQ YD FT FT FT EACH EACH SQ FT FT FT FΤ 10 13+77 14+03 LT143 R-2 10 13+78 14+03 LT 25 RT 25 R-3 10 13+78 14+03 15+47 LT 25 10 15+56 1 25 R-5 10 15+47.5 15+73.5 LTR-6 10 15+47.5 15+74.5 LT 147 QUANTITIES R-7 10 15+49.5 15+53.5 RT R-8 15+47.5 RT 10 *15+67* 134 10 15+47.5 15+79 RT43 10 15+76 15+83.5 RT 10 R-10 RA-1 10 13+78.80 14+04.20 LT*25.50* RA-2 10 13+87.95 14+04.20 RT 16.25 RA-3 10 15+45.80 15+71.10 LT 23.25 ESTIMATED RA-4 10 15+45.75 15+66.20 RT 23.25 13+87.10 40 D-1 10 LT 10 13+87.10 13+87.40 D-2 D-3 10 13+87.10 13+90.90 RT1.78 8 10 26 D-4 15+62.80 10 LT D-5 15+62.80 15+75.70 15+79.50 RT 10 15+62.80 29 D-7 10 15+75.70 15+79.50 LT & RT 45 2 15+76 15+79.50 RT 5 D-8 10 D-9 10 15+79.50 15+83.50 RT 5 13+72.50 14+02.60 LT 203 W-1 10 13+88.10 14+02.60 RT 102 W-2 10 15+47.30 15+74.40 LT175 W-3 10 W-4 10 15+47.30 15+70.70 RT176 LT C-1 10 13+88.10 14+03.10 15 C-2 10 13+88.10 14+03.10 RT15 10 15+46.80 15+61.80 LT C-3 15 C-4 10 15+61.80 16+00.00 LT 35 SP 15+46.80 15+61.80 RT C-5 10 15 MOHICAN STRUCTURES C-6 15+61.80 15+83.00 RT 45 SD S ⋖ 9 28 TOTALS CARRIED TO GENERAL SUMMARY 88.25 1.78 53 66 424 118 35 3 45 10 2 656 60 80

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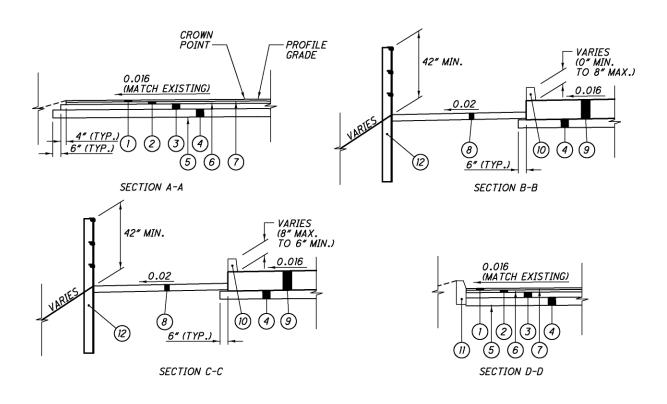


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LEGEND

- 1 442 1 1/4" ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (448), AS PER PLAN
- 2 442 1 3/4" ASPHALT CONCRETE INTERMEDIATE
 3 301 4" ASPHALT CONCRETE BASE, PG64-22
 4 304 6" AGGREGATE BASE
 5 204 SUBGRADE COMPACTION
 6 407 TACK COAT 442 1 ¾ " ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (448), AS PER PLAN

- 7 407 TACK COAT FOR INTERMEDIATE COURSE
- (8) 608 4" CONCRETE WALK
 - 526 REINFORCED CONCRETE APPROACH SLAB (T=12")
- 609 CURB, TYPE 4-A, AS PER PLAN
- 609 CURB, TYPE 6
- 517 RAILING, MISC.: A588 STRUCTURAL STEEL SHAPES

	PROJECT GROUND COORDS US SURVEY FEET										
Primary Control Points											
	CENTERLINE R/W NR 8 (NAT. RESOURCE-08-1.43(1965) USED FOR ALIGNMENT										
NAME	STATION	OFFSET(ft)	NORTH(ft)	EAST(ft)	ELEVATION(ft)	FEATURE					
CP01	15+66.23	547.59	344746.7640	2020057.6830	971.8220	IPINS					
CP02	15+81.76	1163.20	344517.7900	2020641.6242	970.7000	DRILLHS					
CP03	<i>15+34.23</i>	50.19	345017.4446	2019636.3463	969.6676	IPINS					
CP04	15+92.66	-8.39	345100.8658	2019624.8500	984.0996	RSPKS					
BM01	16+31.29	37.21	345131.0101	2019679.3857	985.8500	ВМ					
BM02	15+27.15	49.80	345012.3465	2019631.4080	968.5200	ВМ					

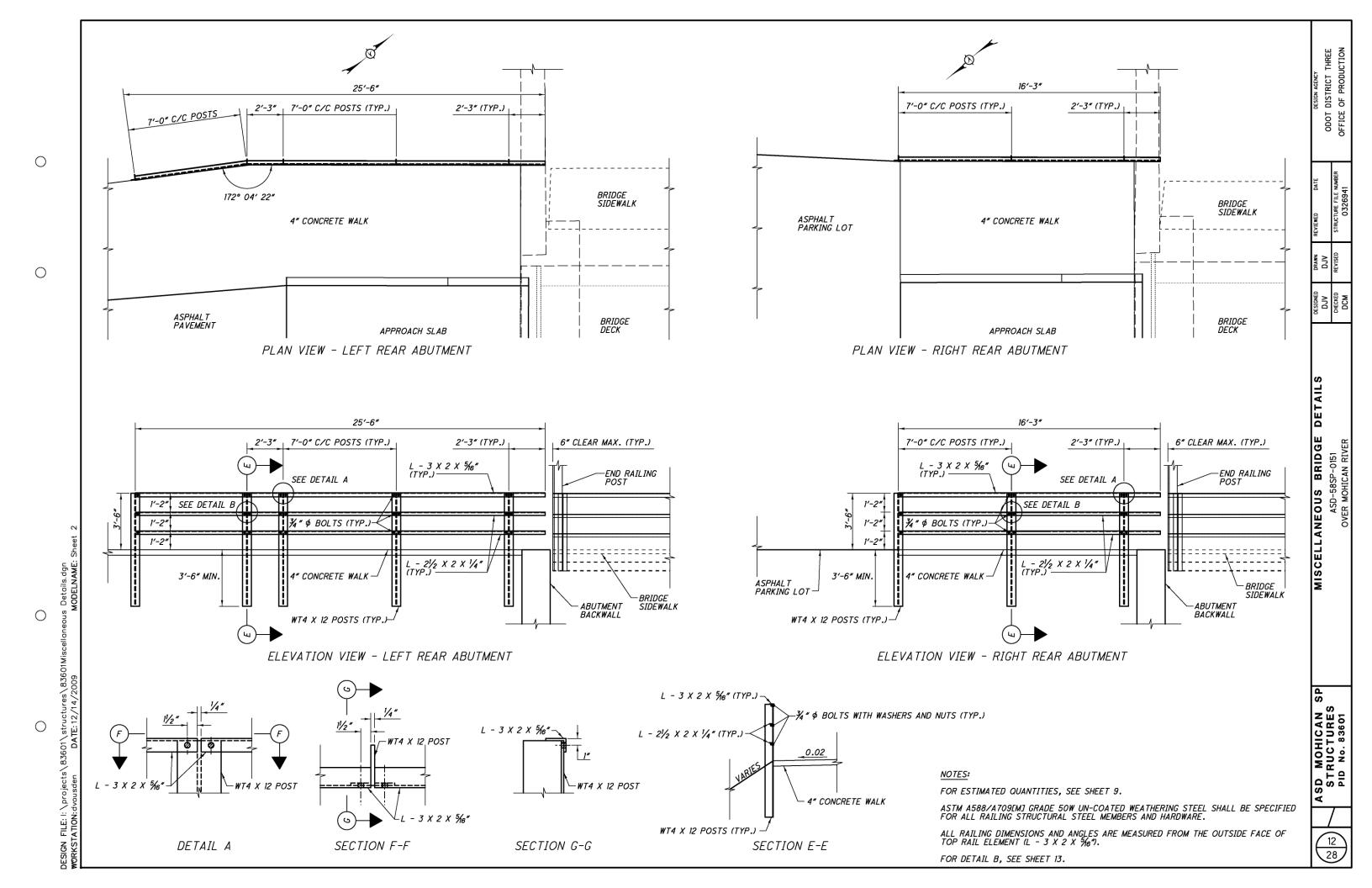
		NR 08 MO	NUMENTATIO	N/ALIGNMENT				
	CENTERLINE	R/W NR 8	(NAT. RESOURCE-08-1.43(1965) USED FOR ALIGNMENT)					
NAME	STATION	OFFSET(ft)	NORTH(ft)	EAST(ft)	ELEVATION(ft)	FEATURE		
SV10	14+03.90	11.98	344944.0025	2019522.0893	983.5293	JOINT		
SVII	14+03.89	-11.98	344959.6925	2019503.9820	983.4832	JOINT		
SV12	15+46.12	-11.98	345067.1535	2019597.1568	983.5053	JOINT		
SV13	15+46.10	11.98	345051.4462	2019615.2467	983.5455	JOINT		
ALIGNMENT								
CL 05	12+10.97	0.00	344786.0181	2019418.2021	0.0000	CALPT		
CL 04	12+97.12	-9.60	344869.0360	2019441.2343	0.0000	CALPT		
CL 02	13+80.44	0.00	344934.1291	2019497.6730	0.0000	CALPT		
CL 03	13+80.44	381.97	344683.9029	2019786.2694	0.0000	CALPT		
CL01	14+75.00	0.00	345005.5737	2019559.6187	0.0000	CALPT		
CL 06	15+57.61	0.00	345067.9894	2019613.7360	0.0000	CALPT		
CL07	15+57.61	-119.37	345146.1880	2019523.5463	0.0000	CALPT		
CL 09	16+39.19	25.21	345129.6281	2019667.1795	0.0000	CALPT		
CL 08	17+00.74	0.00	345201.8112	2019629.1647	0.0000	CALPT		

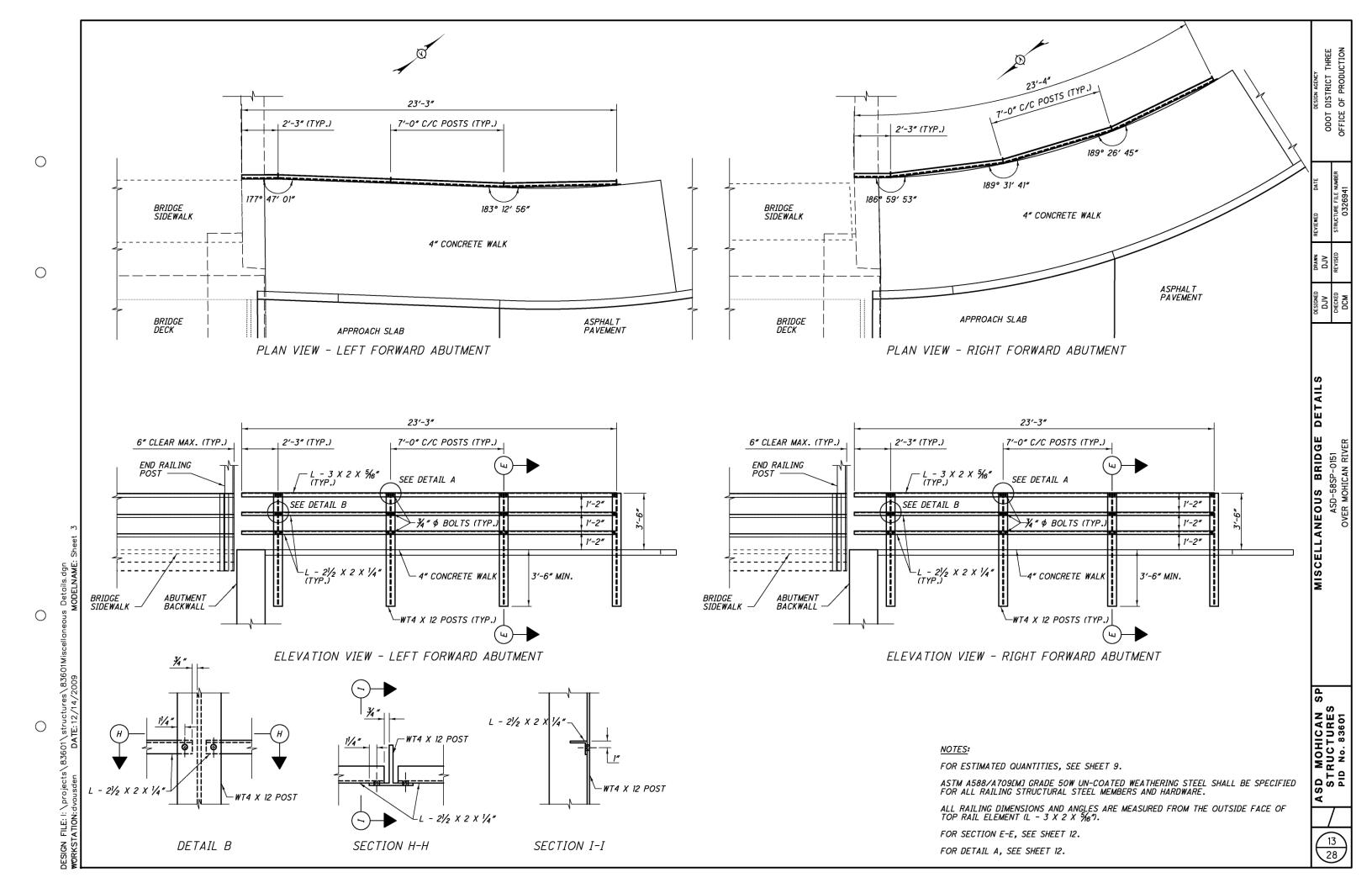
CONTROL POINT REFERENCE TIES										
S. COR. CONC. PAD - MENS BATHROOM IRON PIN W/CAP SET PARKING SIGN POST 164.2' GRASS S. COR. CONC. PAD - MENS BATHROOM IRON PIN W/CAP SET V/CAP SET ASPHALT DRIVE	ASPHALT	CURB 42.3 1.7'RR SPIKE SET CATCH BRIDGE BASIN WINGWALL ROAD BMOI 22.6 IRON PIN W/CAP SET BMO22 66.3 SPEED AIMIT								
CP01	CP02	CP03/CP04/BM01/BM02								

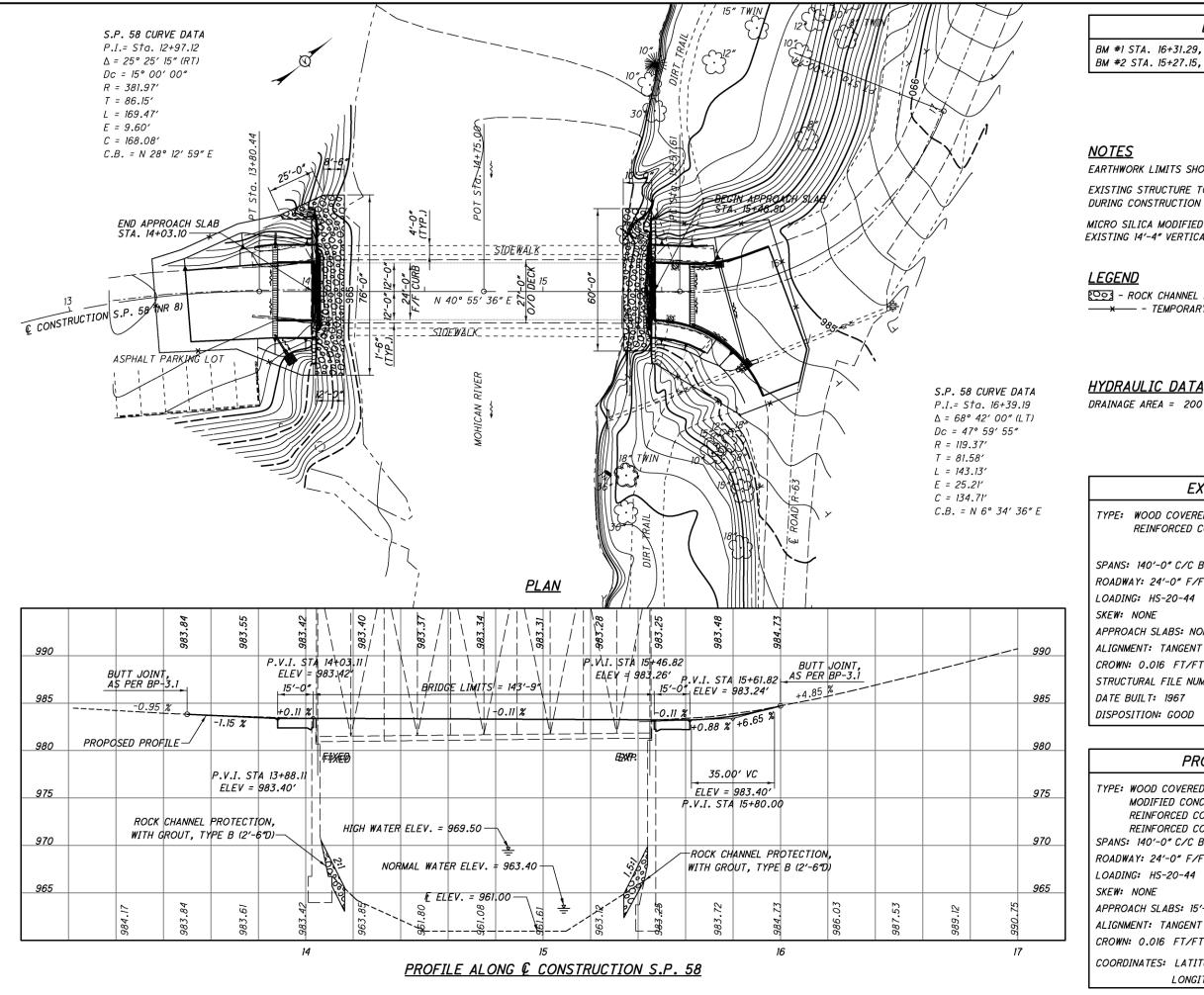
<u>NOTES:</u>

FOR PAVEMENT, EARTHWORK AND SEEDING QUANTITIES, SEE OFFICE CALCULATIONS. FOR APPROACH RAILING DETAILS, SEE SHEETS 12-13.

FOR ESTIMATED QUANTITIES, SHEE SHEET 9.







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BENCHMARK DATA

BM #1 STA. 16+31.29. ELEV. 985.85, OFFSET 37.21', RT. BM #2 STA. 15+27.15, ELEV. 968.52, OFFSET 49.80, RT.

EARTHWORK LIMITS SHOWN ARE APPROXIMATE.

EXISTING STRUCTURE TO BE REHABILITATED. ROAD TO BE CLOSED DURING CONSTRUCTION AND TRAFFIC TO BE DETOURED.

MICRO SILICA MODIFIED CONCRETE DECK OVERLAY SHALL MAINTAIN EXISTING 14'-4" VERTICAL CLEARANCE.

- ROCK CHANNEL PROTECTION, WITH GROUT, TYPE B (2'-6" D)

HYDRAULIC DATA

DRAINAGE AREA = 200 SQ. MILES

EXISTING STRUCTURE

TYPE: WOOD COVERED THRU STEEL TRUSS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 140'-0" C/C BEARINGS

ROADWAY: 24'-0" F/F 1'-6" SAFETY CURB WITH 4' SIDEWALK

LOADING: HS-20-44

SKEW: NONE

APPROACH SLABS: NONE

CROWN: 0.016 FT/FT

STRUCTURAL FILE NUMBER: 0326941

DATE BUILT: 1967 DISPOSITION: GOOD

PROPOSED STRUCTURE

TYPE: WOOD COVERED THRU STEEL TRUSS WITH 11/4" MICRO-SILICA MODIFIED CONCRETE DECK OVERLAY AND 25'-0" WIDE REINFORCED CONCRETE APPROACH SLABS ON EXISTING REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 140'-0" C/C BEARINGS

ROADWAY: 24'-0" F/F 1'-6" SAFETY CURB WITH 4' SIDEWALK

LOADING: HS-20-44

SKEW: NONE

APPROACH SLABS: 15'-0" LONG (AS-1-81)

ALIGNMENT: TANGENT

CROWN: 0.016 FT/FT

COORDINATES: LATITUDE 40° 36' 47" N LONGITUDE 82° 18' 59" W

28

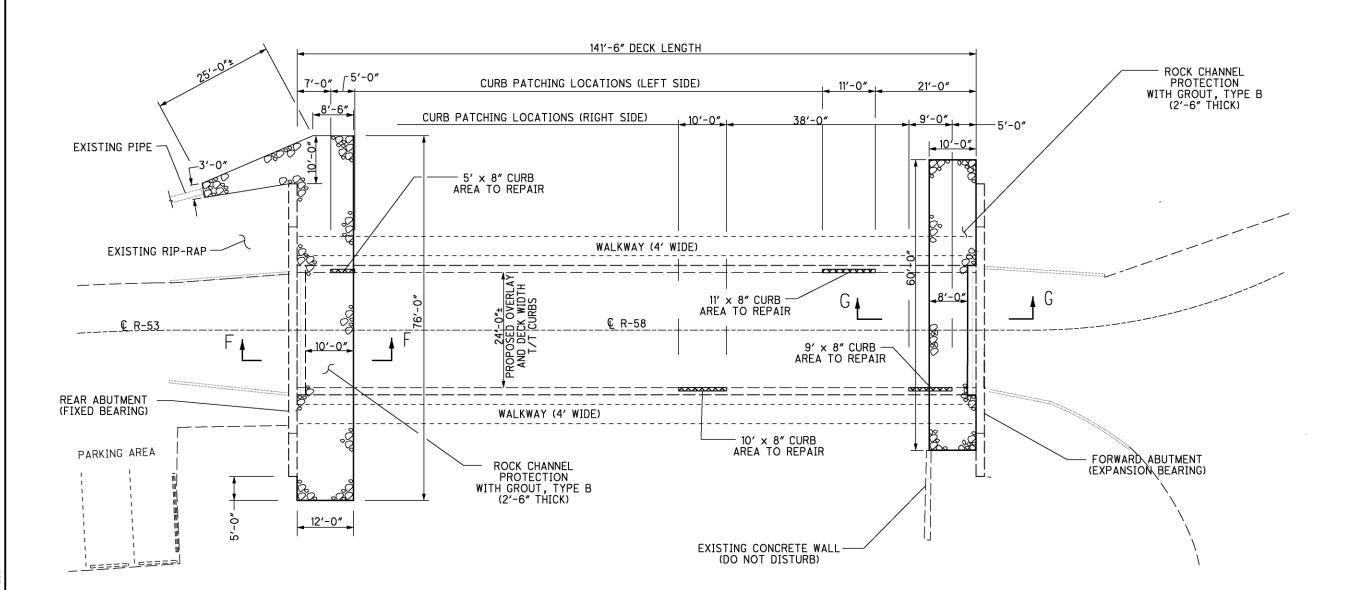
DESIGN AGENCY
ODOT DISTRICT THREE
OFFICE OF PRODUCTION

PLAN SITE

ASD MOHICAN S STRUCTURES PID No. 83601

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PLAN VIEW

ITEM	QUANTITY	UNIT	DESCRIPTION
202	.5	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN
511	.5	CU YD	CLASS S CONCRETE, MISC.: CURB REPAIR
SPECIAL	378	SQ YD	BRIDGE DECK GROOVING
601	138	CU YD	ROCK CHANNEL PROTECTION WITH GROUT, TYPE B
847	378	SQ YD	MICRO SILICA MODIFIED CONCRETE OVERLAY, AS PER PLAN (11/4" THICK)
847	5	CU YD	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), AS PER PLAN
847	LUMP		TEST SLAB

QUANTITIES CARRIED TO GENERAL SUMMARY.

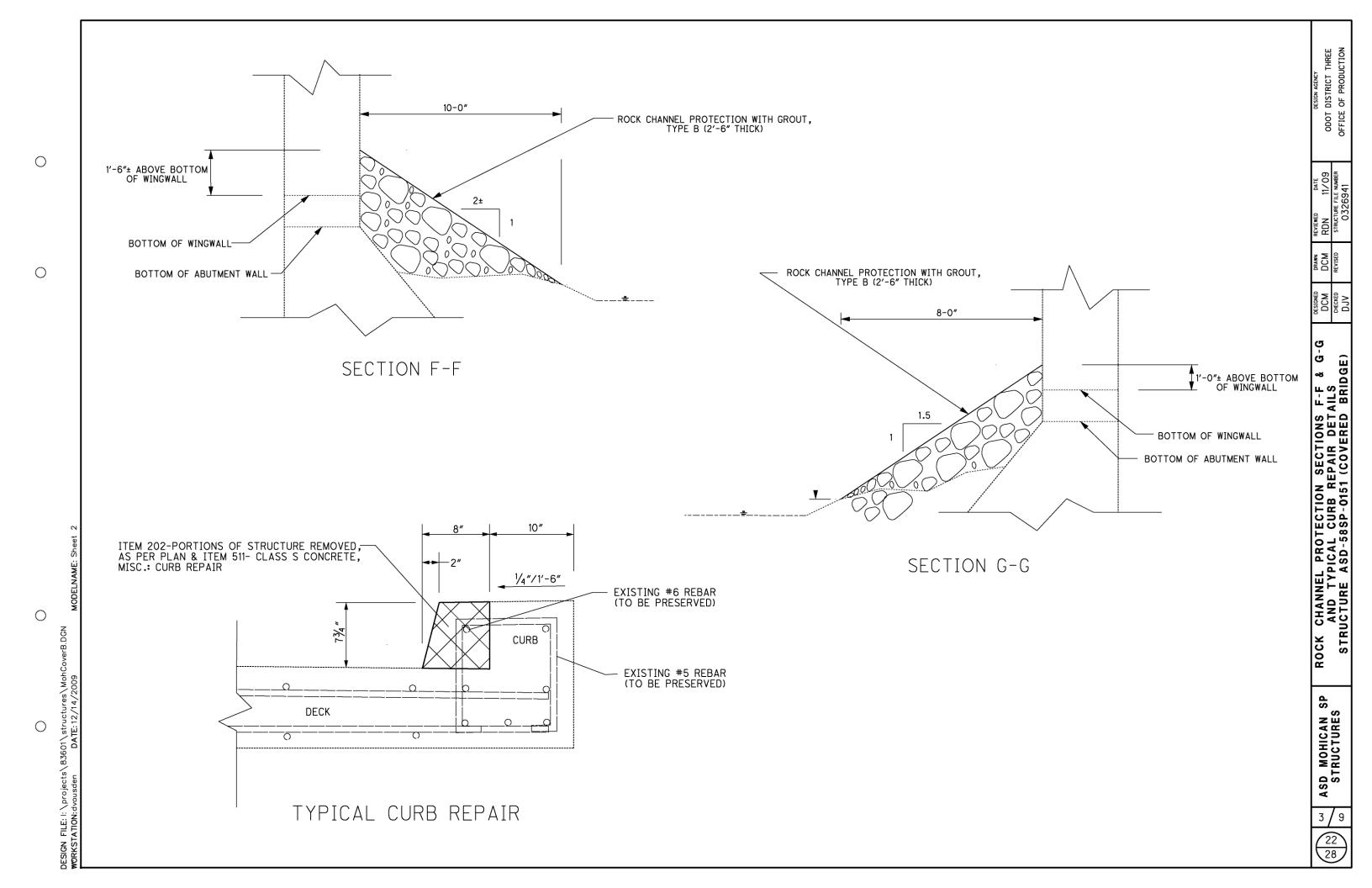
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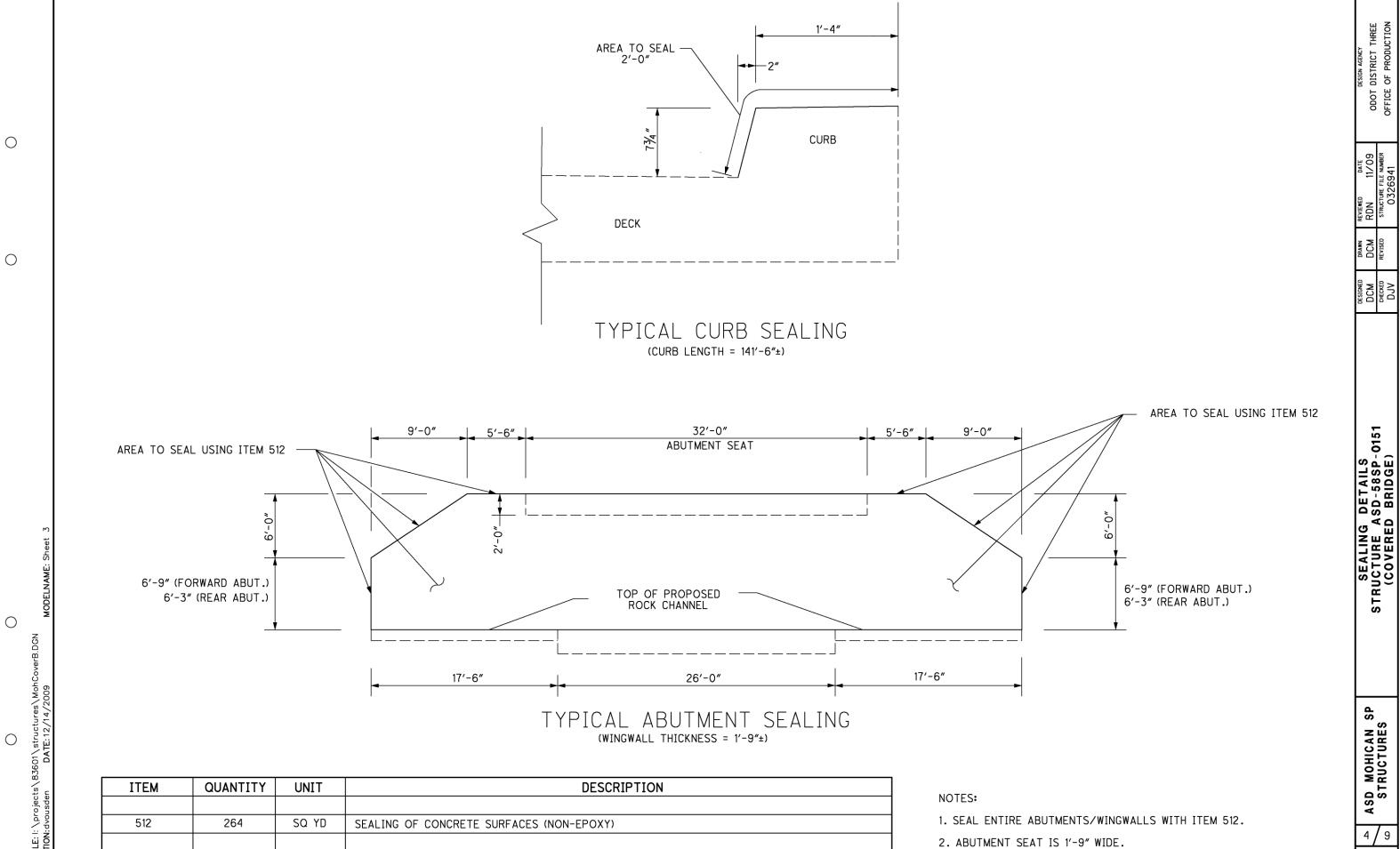
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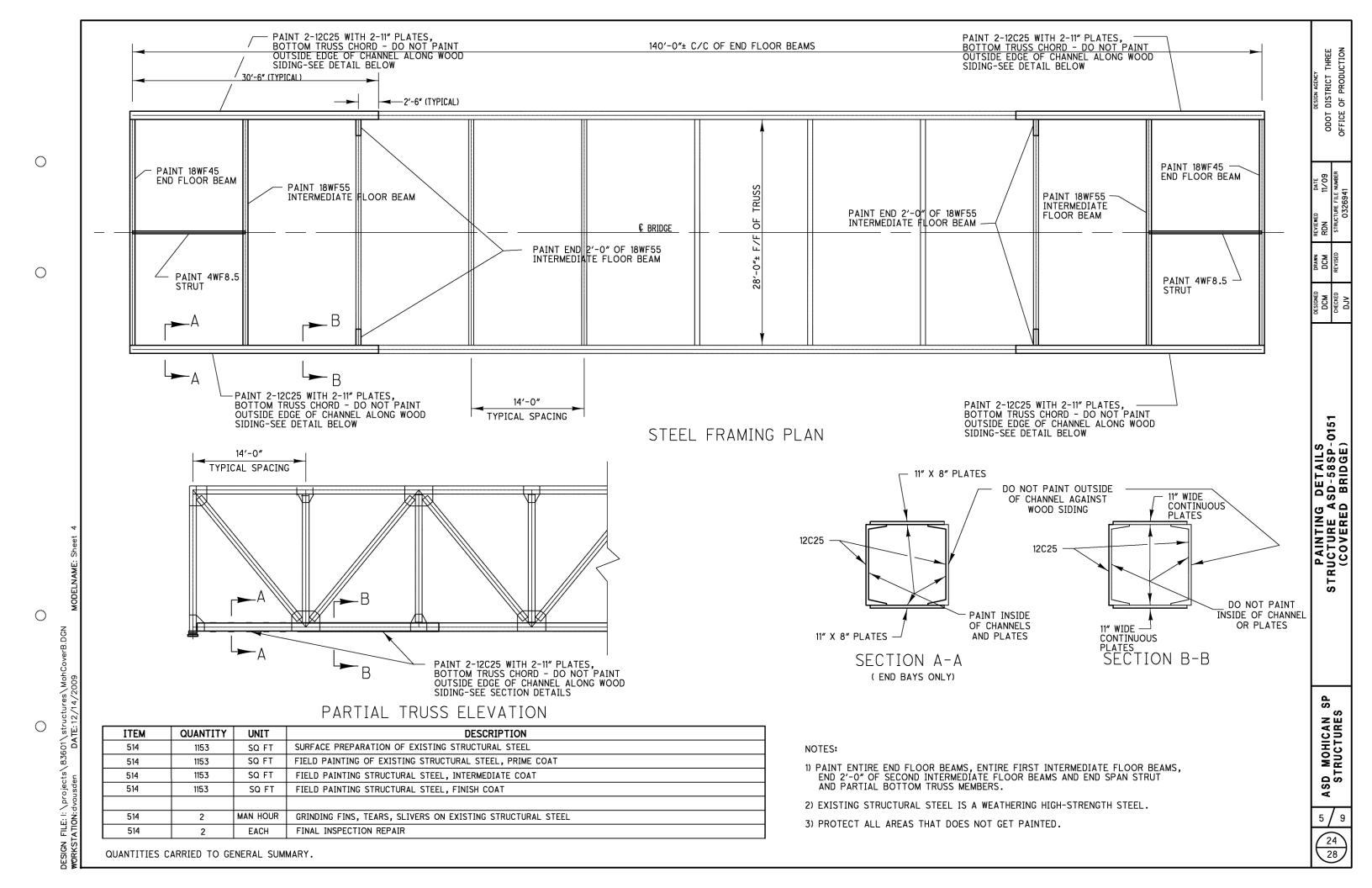
- 1) SEAL CURBS, ABUTMENTS AND WINGWALLS USING ITEM 512, SEE SHEET 4/9 FOR DETAILS.
- 2) ADD ROCK CHANNEL PROTECTION WITH GROUT AT BOTH ABUTMENTS AS DETAILED ABOVE. SEE SHEET 3/9 FOR SECTIONS F-F AND G-G.
- 3) REMOVE 11/4" OF EXISTING DECK AND PLACE NEW 11/4" THICK MICRO SILICA MODIFIED CONCRETE OVERLAY ON THE DECK, THE TOP OF NEW THE OVERLAY SHALL MATCH THE TOP OF THE EXISTING DECK SURFACE.
- 4) REPAIR STRUCTURE CURBS AT LOCATIONS SHOWN ABOVE AND AS PER DETAILS ON SHEET 3/9.

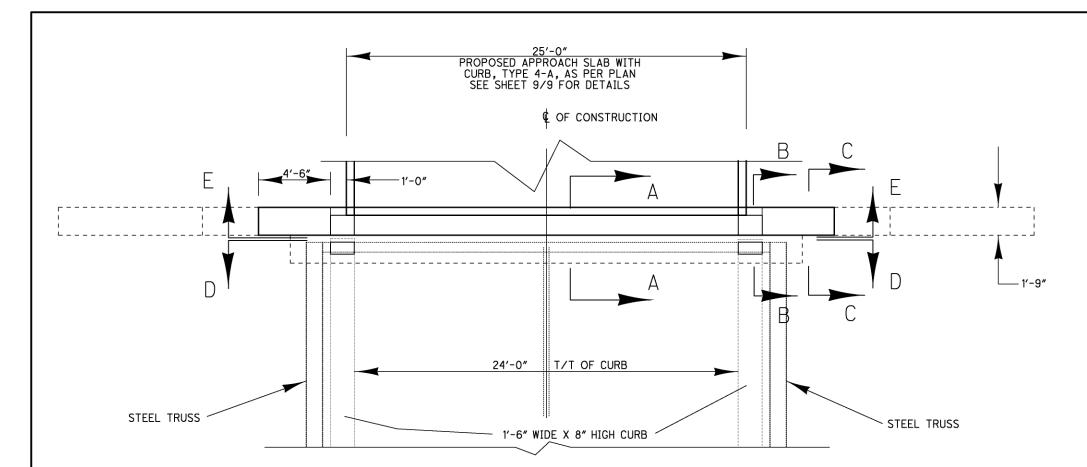




QUANTITIES CARRIED TO GENERAL SUMMARY.

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PARTIAL ABUTMENT PLAN VIEW

	36'-0"± REMOVAL LENGTH	
EXISTING #5 REBAR (TO BE PRESERVED)	© OF CONSTRUCTION A501 FA & A502 RA- 16 SPACES © 1'-6" = 24' A504 RF	EXISTING #5 REBAR (TO BE PRESERVED)

SECTION E-E (REINFORCING STEEL)

	ITEM	QUANTITY	UNIT	DESCRIPTION				
	202	13.9	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN				
	509	1089	POUND	EPOXY COATED REINFORCING STEEL				
	510	34	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT				
	511	.2	CU YD	CLASS S CONCRETE, MISC.: CURB REPAIR				
Г	511	12.2	CU YD	CLASS C CONCRETE, ABUTMENT, AS PER PLAN (REPAIR)				
	516	53	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC COMPRESSION SEAL, AS PER PLAN				

QUANTITIES CARRIED TO GENERAL SUMMARY.

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NOTES:

- 1) SEE SHEETS 7/9 AND 8/9 FOR SECTIONS A-A AND B-B.
- 2) SEE SHEETS 8/9 AND 9/9 FOR SECTIONS C-C, D-D AND E-E.
- 3) ALL EXISTING VERTICAL REBARS (TO BE PRESERVED)

ITEM 509 - EPOXY COATED REINFORCING STEEL										
MARK	NUMBER	LENGTH	WEIGHT	TYPE						
A501	17	3′-8″	65	STR.						
A502	17	4'-1"	72	STR.						
A503	6	35′-0″	219	STR.						
A504	2	32'-8"	68	STR.						
A601	4	26′-8″	160	STR.						
D801	36	5′-3″	505	BENT						

TOTAL

1089

LEGEND

FA - FORWARD ABUTMENT RA - REAR ABUTMENT FF - FRONT FACE RF - REAR FACE

QUANTITIES CARRIED TO SHEET 6/9.

BENDING DIAGRAM

