

SUMMARY OF QUANTITIES

X081-2A

ITEM NO.	CODE NUMBER	ITEM	UNIT	TOTAL
*	1	20200100	EARTH EXCAVATION	CU. YD. 169.2
*	2	20201300	SHOULDER SHAPING	FOOT 396
	3	20300100	CHANNEL EXCAVATION	CU. YD. 132.7
	4	25000300	SEEDING, CLASS 3	ACRE 0.38
	5	25000400	NITROGEN FERTILIZER NUTRIENT	POUND 34.2
	6	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND 34.2
	7	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND 34.2
	8	25100115	MULCH METHOD 2	ACRE 0.38
	9	20700110	POROUS GRANULAR EMBANKMENT	TON 133.6
	10	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND 200
	11	28000400	PERIMETER EROSION BARRIER	FOOT 484
	12	28100109	STONE RIPRAP, CLASS A5	SQ. YD. 693
	13	28200200	FILTER FABRIC	SQ. YD. 693
	14	35101400	AGGREGATE BASE COURSE, TYPE B	TON 261
	15	40603080	HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N50	TON 66.0
	16	40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON 110.7
*	17	48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ. YD. 88.2
	18	50100100	REMOVAL OF EXISTING STRUCTURES	EACH 1
	19	50200100	STRUCTURE EXCAVATION	CU. YD. 103.4
	20	50300225	CONCRETE STRUCTURES	CU. YD. 151.5
	21	50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ. FT. 3,594
	22	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND 10,560
*	23	50901115	STEEL RAILING (SPECIAL)	FOOT 240
	24	51200959	FURNISHING METAL SHELL PILES, 14"x0.312"	FOOT 980
	25	51202305	DRIVING PILES	FOOT 980
	26	51203200	TEST PILE METAL SHELLS	EACH 4
	27	50300280	CONCRETE ENCASEMENT	CU. YD. 13.1
	28	51500100	NAME PLATES	EACH 1
	29	58100200	WATERPROOFING MEMBRANE SYSTEM	SQ. YD. 399.3
	30	58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT 1071
Δ	31	63100075	TRAFFIC BARRIER TERMINAL, TYPE 5A	EACH 4
Δ*	32	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH 4
	33	63200310	GUARDRAIL REMOVAL	FOOT 294
	34	66500105	WOVEN WIRE FENCE, 4'	FOOT 210
*	35	66502300	WOVEN WIRE FENCE REMOVAL	FOOT 236
	36	67100100	MOBILIZATION	LSUM 1
*	37	70101700	TRAFFIC CONTROL AND PROTECTION	LSUM 1
*	38	X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH 1
*	39	X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH 1
*	40	Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH 40

\* SEE THE SPECIAL PROVISIONS  
 Δ SPECIALTY ITEMS

GENERAL NOTES:

- THE EXISTING ROAD SHALL REMAIN CLOSED TO THRU TRAFFIC DURING CONSTRUCTION.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE WASTE AREAS AND/OR DISPOSAL SITE(S) OUTSIDE THE RIGHT-OF-WAY AND EASEMENTS, FOR EXCESS OR UNSUITABLE MATERIAL, WHICH IS NOT DESIRABLE TO BE INCORPORATED INTO THE WORK INVOLVED ON THIS PROJECT.
- EXISTING STRUCTURES (INCLUDING FOUNDATIONS, WALLS, CISTERNS, WELLS OR OTHER UNDERGROUND STRUCTURES) WITHIN THE RIGHT-OF-WAY SHALL BE REMOVED IN ACCORDANCE WITH ARTICLES 501.02 AND 501.03 OF THE STANDARD SPECIFICATIONS, WITHOUT ADDITIONAL COMPENSATION, UNLESS OTHERWISE NOTED IN THE PLANS, SPECIAL PROVISIONS, OR APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE TO ITEMS NOT SPECIFIED FOR REMOVAL, RECONSTRUCTION, OR DEMOLITION. AREAS OUTSIDE THE PROJECT SCOPE OR CONSTRUCTION LIMITS DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED OR REPAIRED BY THE CONTRACTOR, PER THE APPROVAL OF THE ENGINEER. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS WORK.
- EXCAVATION OF EXISTING GRAVEL OR SEAL COAT AGGREGATE SURFACES SHALL BE CONSIDERED EARTH EXCAVATION, AND WILL NOT BE PAID FOR SEPARATELY.
- THE FINAL TOP SIX INCHES OF SOIL IN ANY RIGHT-OF-WAY OR EASEMENT AREA DISTURBED BY THE CONTRACTOR MUST BE A COHESIVE SOIL CAPABLE OF SUPPORTING VEGETATION.
- NO OVERHAUL HAS BEEN COMPUTED AND NONE SHALL BE PAID FOR FROM ANY SOURCE.
- PER ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS, A PERMIT SHALL BE OBTAINED FROM IEPA AND MADE AVAILABLE TO THE ENGINEER PRIOR TO OPEN BURNING OF ORGANIC WASTE (I.E. PLANT REFUSE RESULTING FROM PRUNING OR REMOVAL OF TREES OR SHRUBS) OR OTHER CONSTRUCTION OR DEMOLITION DEBRIS.
- SEE THE SPECIAL PROVISIONS REGARDING THE NATIONWIDE 404 PERMIT REQUIREMENTS FOR IN-STREAM ACCESS FILL, COFFERDAMS, CAUSEWAYS, OR CROSSINGS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE PROPER PERMITS FOR THESE ACTIVITIES.
- PLACE RIPRAP IN A TIMELY MANNER TO PREVENT EROSION, ETC.
- EXCAVATED AREAS AND EMBANKMENT SHALL BE PERMANENTLY SEEDED IMMEDIATELY AFTER FINAL GRADING. IF NOT, THEY SHALL BE TEMPORARILY SEEDED IF NO CONSTRUCTION ACTIVITY IN THE AREA IS PLANNED FOR 7 DAYS.

SCHEDULE OF QUANTITIES

ROADWAY EXCAVATION & EMBANKMENT  
 (SEE ROADWAY CROSS SECTIONS)

STATION	AREAS		VOLUMES		CUMULATIVE VOLUMES	
	Square Feet		Cubic Yards		Cubic Yards	
	CUT	FILL	CUT	FILL	CUT	FILL
68+80	27.0	0.3				
69+00	23.1	0.5	18.6	0.3	18.6	0.3
69+50	15.8	7.1	36.0	7.0	54.6	7.3
69+71	15.8	60.7	12.3	26.4	66.9	33.7
69+79.25	0	94.4	2.4	23.7	69.3	57.4
BRIDGE	0	0	0	0	69.3	57.4
71+00.75	22.8	70.3	6.9	15.4	76.1	72.8
71+08	28.2	44.6	43.9	35.4	120.0	108.2
71+50	28.2	0.9	49.2	1.5	169.2	109.7
72+00	24.9	0.7	0	0	169.2	109.7

DOWNSTREAM  
 UPSTREAM

CHANNEL EXCAVATION  
 (SEE CHANNEL CROSS SECTIONS)

STATION	AREAS		VOLUMES		CUMULATIVE VOLUMES	
	Square Feet		Cubic Yards		Cubic Yards	
	CUT	FILL	CUT	FILL	CUT	FILL
38'	0	0				
30'	58.4	0	13.0	0	13.0	0
15'	61.9	0	33.4	0	46.4	0
CENTERLINE	40.8	0	28.5	0	74.9	0
15'	40.2	0	22.5	0	97.4	0
30'	56.6	0	26.9	0	124.3	0
42'	0	0	8.4	0	132.7	0
			0	0	132.7	0

CONCRETE STRUCTURES

	CU. YD.
SOUTH ABUTMENT	11.1
WALL PIER (BENT #3)	64.6
WALL PIER (BENT #4)	64.6
NORTH ABUTMENT	11.1
<b>TOTAL</b>	<b>151.5</b>

STONE RIPRAP, CLASS A5

	SQ. YD.
SOUTH ABUTMENT	346
NORTH ABUTMENT	346
<b>TOTAL</b>	<b>693</b>

AGGREGATE BASE COURSE, TYPE B

	TON
STA. 68+80 TO STA. 69+79.25	130.5
STA. 71+00.75 TO STA. 72+00	130.5
<b>TOTAL</b>	<b>261</b>

HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50

	TON
STA. 68+80 TO STA. 69+79.25	21.8
BRIDGE	67.1
STA. 71+00.75 TO STA. 72+00	21.8
<b>TOTAL</b>	<b>110.7</b>

HOT-MIX ASPHALT BINDER, IL-19.0, N50

	TON
STA. 68+80 TO STA. 69+79.25	33.0
STA. 71+00.75 TO STA. 72+00	33.0
<b>TOTAL</b>	<b>66.0</b>

WOVEN WIRE FENCE REMOVAL

	FOOT
STA. 68+80 TO STA. 69+98, LT	119.3
STA. 70+86 TO STA. 72+00, LT	116.2
<b>TOTAL</b>	<b>235.6</b>

WOVEN WIRE FENCE, 4'

	FOOT
STA. 68+80 TO STA. 69+90, LT	110
STA. 71+00 TO STA. 72+00, LT	100
<b>TOTAL</b>	<b>210</b>

SEEDING, CLASS 3

	ACRE
STA. 68+80 TO STA. 69+79.25, LT & RT	0.19
STA. 71+00.75 TO 72+00, LT & RT	0.19
<b>TOTAL</b>	<b>0.38</b>

EARTHWORK SUMMARY

	CUT	FILL
TOTAL ROADWAY EXCAVATION	169.2	109.7
TOTAL CHANNEL EXCAVATION	132.7	0
<b>TOTAL CUT</b>	<b>301.9</b>	
<b>TOTAL FILL</b>		<b>109.7</b>
DEDUCT SUITABLE EARTH EXCAVATION (25% SHRINKAGE)	226.4	
TOTAL FURNISHED EXCAVATION REQUIRED		-116.7

SAFETY NOTE:

"MISSMAN, STANLEY & ASSOCIATES (MISSMAN) HAS ADOPTED SAFETY PROCEDURES FOR ITS EMPLOYEES WHO PROVIDE PROFESSIONAL ENGINEERING AND SURVEYING SERVICES. A COPY OF THESE PROCEDURES IS AVAILABLE FROM THE SAFETY OFFICER. MSA PERSONNEL ARE NOT TRAINED IN CONTRACTOR (CONSTRUCTION) SAFETY AND COMPLIANCE PROCEDURES. THE METHODS & MEANS TO COMPLY WITH CONSTRUCTION SITE SAFETY ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR."

APPLICATION RATES:

SEEDING, CLASS 3	SEE ARTICLE 250.07 OF STD. SPECS.
NITROGEN FERTILIZER NUTRIENT	90 LBS/ACRE
PHOSPHORUS FERTILIZER NUTRIENT	90 LBS/ACRE
POTASSIUM FERTILIZER NUTRIENT	90 LBS/ACRE
MULCH, METHOD 2	2 TONS/ACRE

GENERAL NOTES, SUMMARY  
 & SCHEDULE OF QUANTITIES

SECTION 05-00023-02-BR  
 F.A.S. 214, STA. 70+40  
 MERCER COUNTY  
 STRUCTURE NO. 066-3043