FOR GENERAL NOTES, SEE SHEET 1 / 78 AND 2 / 78

#### PROPOSED WORK

THE WORK PROPOSED FOR THIS STRUCTURE IS COMPRISED OF BUT NOT LIMITED TO THE FOLLOWING:

- 1. REMOVAL OF THE REINFORCED CONCRETE DECK INCLUDING PARAPETS AND RAILING.
- 2. REMOVAL OF THE ROADWAY END DAMS.
- 3. REMOVAL OF THE EXISTING SCUPPERS.
- 4. REMOVAL AND REPLACEMENT OF THE FORWARD ABUTMENT BACKWALL.
- 5. REMOVAL OF WINGWALL PARAPETS.
- 6. REMOVAL OF THE ASPHALT WEARING SURFACE ON THE REAR APPROACH SLAB.
- 7. RESETTING EXISTING BEARINGS AT THE FORWARD AND REAR ABUTMENTS.

  8. INSTALLING STRUCTURAL EXPANSION JOINTS INCLUDING FLASTOMERIC STRU
- 8. INSTALLING STRUCTURAL EXPANSION JOINTS INCLUDING ELASTOMERIC STRIP SEALS.
- 9. SEALING THE LONGITUDINAL MEDIAN JOINT WITH ELASTOMERIC STRIP SEAL.
- 10. PLACEMENT OF NEW SHEAR STUDS ON BEAMS.
- 11. CONSTRUCTING A NEW REINFORCED CONCRETE DECK SLAB AND NEW SAFETY PARAPETS WITH CHAINLINK FENCE.
- 12. CONSTRUCTING NEW CONCRETE PARAPETS WITH CHAINLINK FENCE AND SIDEWALKS ON THE ABUTMENT WINGWALLS.
- 13. PATCHING DELAMINATED AREAS AT THE ABUTMENTS AND PIERS.
- 14. SEALING OF DESIGNATED CONCRETE SURFACES.15. WIDEN AND OVERLAY WITH ASPHALT CONCRETE THE EXISTING REAR APPROACH
- SLAB.
  16. REMOVAL AND REPLACEMENT OF THE FORWARD APPROACH SLAB.
- 17. CONSTRUCTING REINFORCED CONCRETE SIDEWALKS ON THE APPROACH SLABS.

#### ITEM 202 - PORTIONS OF STRUCTURES REMOVED

THIS ITEM SHALL INCLUDE THE COMPLETE REMOVAL OF THE EXISTING REINFORCED CONCRETE DECK AND PARAPETS, THE COMPLETE REMOVAL OF THE PARAPETS AT THE WINGWALLS, AND THE COMPLETE REMOVAL OF ALL EXPANSION JOINT HARDWARE INCLUDING THOSE PORTIONS OF END DAM GUSSET PLATES AS INDICATED ON SHEET [78/78]. ALSO INCLUDED IS THE COMPLETE REMOVAL OF THE BACKWALL AND APPROACH SLAB AT THE FORWARD (NORTH) ABUTMENT AND THE REMOVAL OF THE TOP 1'-3" OF THE BACKWALL AT THE REAR (SOUTH) ABUTMENT AS INDICATED ON THE ABUTMENT DEMOLITION AND REPAIR DRAWING.

THE FOLLOWING ARE APPROXIMATE QUANTITIES OF MATERIALS TO BE REMOVED UNDER THIS ITEM:

- 1. SUPERSTRUCTURE CONCRETE (APPROX. 644 CUBIC YARDS)
- SUBSTRUCTURE CONCRETE (APPROX. 24 CUBIC YARDS)
   CONCRETE PARAPET (APPROX. 549 LINEAR FEET)
- FOR APPROACH SLAB TO BE REMOVED, SEE HIGHWAY DRAWINGS.

THE ABOVE MATERIALS SHALL BE REMOVED IN TWO PHASES AS SHOWN ON SHEET 40/78 IN THE PROJECT PLANS. EXCAVATION NECESSARY TO REMOVE AND MODIFY PORTIONS OF THE EXISTING STRUCTURE SHALL BE INCLUDED WITH THIS ITEM FOR PAYMENT.

FOR ADDITIONAL NOTES, SEE ITEM 202 – PORTIONS OF STRUCTURES REMOVED ON SHEET  $\boxed{1/78}$  .

## ITEM 513 - STRUCTURAL STEEL

THIS ITEM SHALL CONSIST OF FURNISHING, FABRICATING, AND INSTALLING THE STRUCTURAL STEEL CURB PLATES AND MEDIAN CURB PLATES.

NEW STEEL SHALL BE CLEANED AND PRIME PAINTED IN THE FIELD. AT THE CONTRACTOR'S OPTION, NEW STEEL MAY BE GIVEN A PRELIMINARY CLEANING IN THE SHOP. THE COST OF CLEANING AND PRIME PAINTING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE SPECIAL ITEMS "FIELD PAINTING OF NEW STRUCTURAL STEEL, SYSTEM OZEU."

## ITEM 517 - RAILING (CLASS S CONCRETE PARAPET WITH CHAIN LINK FENCE)

THIS ITEM SHALL INCLUDE THE FURNISHING OF CLASS S CONCRETE PARAPET, THE PARAPET REINFORCEMENT, THE FENCE, ANY OTHER RAILING MATERIALS AND THE NECESSARY LABOR TO CONSTRUCT AND ERECT THE COMPLETED RAILING AS SHOWN ON SHEET 76 / 78 .

## ITEM 518 - POROUS BACKFILL, AS PER PLAN

POROUS BACKFILL SHALL BE GRAVEL AND SHALL BE ENCASED WITH FILTER FABRIC TO THE LIMITS SHOWN ON SHEET 75/78. THE FILTER FABRIC SHALL CONFORM TO ITEM 712.09, TYPE A AND SHALL BE INCLUDED WITH ITEM 518 — POROUS BACKFILL, AS PER PLAN FOR PAYMENT.

ADDITIONAL EXCAVATION (IN EXCESS OF WHAT IS NECESSARY IN ITEM 202 TO REMOVE PORTIONS OF THE EXISTING STRUCTURE) REQUIRED TO REPLACE POROUS BACKFILL BEHIND THE FORWARD ABUTMENT SHALL BE INCLUDED IN ITEM 518 — POROUS BACKFILL, AS PER PLAN FOR PAYMENT.

#### REPAIR OF EXISTING CONCRETE

ITEM 519 — PATCHING CONCRETE STRUCTURES SHALL BE USED AS DIRECTED BY THE ENGINEER AND AS OUTLINED ON THE ABUTMENT DEMOLITION AND REPAIR DRAWING TO REPAIR DAMAGED CONCRETE AREAS. ALL SURFACES TO BE PATCHED AND THE EXPOSED REINFORCING STEEL WITHIN, SHALL BE THOROUGHLY CLEANED BY ABRASIVE BLASTING PRIOR TO THE CLEANING SPECIFIED BY 519.04 AND 520.05. CLEANING SHALL PRECEDE APPLICATION OF THE PATCHING MATERIAL BY NOT MORE THAN 24 HOURS.

#### ITEM 601 - CRUSHED AGGREGATE SLOPE PROTECTION

THIS WORK SHALL INCLUDE REMOVAL OF EXISTING SLOPE PROTECTION MATERIAL AND EXCAVATION OF ANY MATERIAL NECESSARY TO ACHIEVE A 12" MINIMUM CRUSHED AGGREGATE SLOPE PROTECTION DEPTH. ALSO INCLUDED IS THE PLACEMENT OF EMBANKMENT MATERIAL, COMPACTED IN ACCORDANCE WITH ITEM 203, TO FILL ERODED AREAS AND THE PLACEMENT OF NEW CRUSHED AGGREGATE SLOPE PROTECTION AS INDICATED IN PROJECT PLANS.

ALL COSTS FOR THE REMOVAL OF EXISTING SLOPE PROTECTION MATERIAL, EXCAVATION, EMBANKMENT, AND PLACEMENT OF CRUSHED AGGREGATE SLOPE PROTECTION SHALL BE INCLUDED UNDER THE CONTRACT BID PRICE PER SQUARE YARD, ITEM 601 — CRUSHED AGGREGATE SLOPE PROTECTION.

## ITEM 622 - TEMPORARY CONCRETE BARRIER, BRIDGE MOUNTED

THE TEMPORARY PRECAST CONCRETE BARRIERS ON THIS BRIDGE DECK MUST BE ATTACHED TO THE DECK WHERE INDICATED IN THE DRAWINGS. ANCHORING DETAILS SHOWN ON SHEET 41 / 78 SHALL BE USED WHERE REQUIRED.

FURNISHING, INSTALLING, MAINTAINING, AND REMOVING TEMPORARY RAILING, INCLUDING THE COMPLETE OR PARTIAL REMOVAL OF ANCHOR HARDWARE AND THE FILLING OF THE ANCHOR VOIDS WITH NONSHRINK GROUT (WHERE ANCHORING IS REQUIRED), SHALL BE INCLUDED IN ITEM 622 (ROADWAY PLANS) FOR PAYMENT.

#### SIDEWALKS ON APPROACH SLABS

ALL MATERIALS (INCLUDING BUT NOT LIMITED TO CLASS S CONCRETE, REINFORCING STEEL, AND DOWELS) AND LABOR REQUIRED IN CONSTRUCTING SIDEWALKS ON APPROACH SLABS AS INDICATED IN DETAILS ON SHEET 56 / 78 AND 57 / 78 OF THE BRIDGE PLANS, SHALL BE INCLUDED FOR PAYMENT IN THE PRICE BID PER SQUARE FOOT FOR ITEM 608 IN THE ROADWAY QUANTITIES.

### ITEM 516 - RESET BEARINGS

RESETTING OF ALL BEARINGS AT BOTH FORWARD AND REAR ABUTMENTS OF LAK-2-0542 SHALL BE ACCOMPLISHED IN ACCORDANCE WITH SHEET 55/78 OF THE PLANS. THE CONTRACTOR SHALL SUBMIT TO THE DIRECTOR FOR APPROVAL HIS PLAN FOR JACKING, BRACING, SHORING, AND RESETTING OF THE BEARINGS WHILE PORTIONS OF THE BRIDGE REMAIN OPEN TO TRAFFIC. THE ENTIRE SUPERSTRUCTURE SHALL BE RAISED AT THE ABUTMENT AT ONE TIME. ALL THE SUPPORTS REQUIRED FOR THE RAISING OF THE SUPERSTRUCTURE SHALL BE DESIGNED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER. THIS ITEM OF WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER EACH BEARING RESET FOR ITEM 516 - RESET BEARINGS. THIS PRICE SHALL BE PAYMENT IN FULL FOR ALL MATERIAL, EQUIPMENT, AND LABOR NECESSARY TO COMPLETE THIS WORK.

DATE\_\_\_\_

BY\_

LAK-2-1.80 (L & R)

LAK-2-3.63 (L & R)

LAK-2-5.42, LAK-2-10.29

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# APPROACH SLAB WIDENING AND REPLACEMENT

ALL MATERIALS (INCLUDING BUT NOT LIMITED TO CLASS C CONCRETE, REINFORCING STEEL, DOWELS, AND PREFORMED EXPANSION JOINT FILLER WITH JOINT SEALER) AND LABOR REQUIRED IN THE WIDENING OR REPLACEMENT OF APPROACH SLABS AS INDICATED IN DETAILS ON SHEETS 56/78 AND 57/78 OF THE BRIDGE PLANS, SHALL BE INCLUDED FOR PAYMENT IN THE PRICE BID PER SQUARE YARD FOR ITEM 611 IN THE ROADWAY QUANTITIES.

### FIELD PAINTING OF NEW STRUCTURAL STEEL, SYSTEM OZEU

THIS WORK SHALL CONSIST OF SUPPLYING THE MATERIALS, LABOR, AND EQUIPMENT NECESSARY FOR THE CLEANING AND FIELD PAINTING OF THOSE PORTIONS OF THE CURB PLATES AND MEDIAN CURB PLATES NOT FULLY ENCASED IN CONCRETE AND THOSE PORTIONS OF THE EXPANSION JOINT HARDWARE NOT FULLY ENCASED IN CONCRETE INCLUDING THE NEW GUSSET SPLICE PLATES DETAILED ON SHEET [78/78]. ALSO INCLUDED FOR PAYMENT UNDER THIS ITEM IS TOUCH—UP PAINTING OF EXISTING STEEL REQUIRED AS A DIRECT RESULT OF THE INSTALLATION OF ANY NEW STEEL.

NEW STEEL SHALL BE PROVIDED BARE FOR PREPARATION AND PAINTING IN THE FIELD. FOR PURPOSES OF FIELD PAINTING, NEWLY ERECTED STEEL SHALL BE CONSIDERED EXISTING STEEL AND SHALL BE PREPARED AND PAINTED WITH A PRIME, INTERMEDIATE AND FINISH COAT OF PAINT IN CONFORMANCE WITH THE PROPOSAL NOTE "FIELD PAINTING OF EXISTING STEEL, SYSTEM OZEU." COST OF CLEANING AND PAINTING OF NEW STEEL WITH THE OZEU PAINT SYSTEM SHALL BE INCLUDED IN SPECIAL ITEMS "FIELD PAINTING OF NEW STRUCTURAL STEEL, SYSTEM OZEU." AT THE CONTRACTOR'S OPTION, NEW STEEL MAY BE GIVEN A PRELIMINARY CLEANING IN THE SHOP.

				ESTIMATED QUANTITIES FOR LAK-2-0542				
ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION		PIERS	SUPER.	GENERAL
202	11200	LUMP		Portions of Structures Removed				LUMP
509	11400	200	16.	Reinforcing Steel, Grade 60				200
509	15800	156,123	lb.	Epoxy Coated Reinforcing Steel, Grade 60			151,882	
510	11100	68	EACH	Dowel Holes	68			
511	34401	698	CU. YD.	Class S Concrete, Superstructure, as per Plan (SEE SHT. 36)		***************************************	698	
511	45700	39	CU. YD.	Class C Concrete, Abutments				
512	33300	22	SQ. YD.	Type A Waterproofing	22			
512	44400	2	SQ. YD.	Type B Waterproofing	2			: 
<i>513</i>	11100	13,152	16	Structural Steel (AISC Category I) (See Proposal Note)		<del></del>	13,152	<del>-</del>
<i>513</i>	20000	2,960	EACH	Welded Stud Shear Connectors			2,960	
516	11201	408	LIN. FT.	Structural Expansion Joints Including Elastomeric Strip Seals , AS PER PLAN (SEE SHT. 88)			408	
<i>516</i>	46700	20	EACH	Reset Bearings			20	
<i>517</i>	75300	546	LIN. FT.	Railing (Class S Concrete Parapet With Chainlink Fence)			546	
518	21101	26	CU. YD.	Porous Backfill, as per plan	26			
519	11100	205	SQ. FT.	Patching Concrete Structures	175	30		
601	2000	648	SQ. YD.	Crushed Aggregate Slope Protection	648			
SPECIAL	512 67500	1,329	SQ. YD.	Sealing of Concrete Surfaces (See Proposal Note)	107		1,222	
SPECIAL		565	SQ. YD.	Sealing of Concrete Surfaces (Non-Epoxy) (See Proposal Note)		565		
SPECIAL		129	SQ. YD.	Sealing of Concrete Surfaces (Epoxy)(See Proposal Note)	129			
SPECIAL	1	LUMP		Field Painting of New Structural Steel, Surface Preparation, System OZEU				LUMP
SPECIAL	514 00420	LUMP		Field Painting of New Structural Steel, Prime Coat, System OZEU		<u></u>		LUMP
	514 00430	LUMP		Field Painting of New Structural Steel, Intermediate Coat, System OZEU				LUMP
SPECIAL		LUMP		Field Painting of New Structural Steel, Finish Coat, System OZEU,				LUMP

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CT		PETZER		MAS, II	NC.							
MILLOUGHE	N	39 / 78										
NOTES AND ESTIMATED QUANTITIES BRIDGE NO. LAK-2-0542 S. R. 2 UNDER LOST NATION ROAD LAKE COUNTY												
ESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED						

B.J.A. | J.L.J. | J.L.J. | R.J.C. | J.E.A.11/15/88|