

**GENERAL NOTES**

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

**PROPOSED WORK**

THE WORK PROPOSED FOR THESE STRUCTURES SHALL BE ACCOMPLISHED IN TWO CONSTRUCTION STAGES AND IS COMPRISED OF BUT NOT LIMITED TO THE FOLLOWING:

- REMOVAL OF THE REINFORCED CONCRETE DECK INCLUDING PARAPETS AND RAILING.
- REMOVAL OF THE ROADWAY END DAMS.
- REMOVAL OF THE EXISTING SCUPPERS.
- REMOVAL OF WINGWALL PARAPETS AND EXISTING MEDIAN BARRIERS TO THE LIMITS SHOWN IN THE BRIDGE DRAWINGS.
- REMOVAL OF EXISTING ASPHALT WEARING SURFACE ON APPROACH SLABS.
- INSTALLING STRUCTURAL PORTIONS OF EXPANSION JOINTS.
- PLACEMENT OF NEW SHEAR STUDS ON BEAMS.
- CONSTRUCTING A NEW REINFORCED CONCRETE DECK SLAB AND NEW SAFETY PARAPETS.
- CONSTRUCTING NEW CONCRETE WINGWALL SAFETY PARAPETS AND MEDIAN TRANSITION BARRIERS.
- PATCHING DELAMINATED AREAS AT THE ABUTMENTS AND PIERS.
- SEALING OF DESIGNATED CONCRETE SURFACES.
- WIDEN AND OVERLAY WITH ASPHALT CONCRETE THE EXISTING APPROACH SLABS.
- INSTALL ELASTOMERIC STRIP SEALS IN ONE CONTINUOUS PIECE IN EACH JOINT.

**ITEM 202 - PORTIONS OF STRUCTURES REMOVED**

THIS ITEM SHALL INCLUDE FOR BOTH LAK-2-0363 (L) AND LAK-2-0363 (R) 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 REMOVAL OF THE TOP 1'-3" OF EACH BACKWALL AS INDICATED ON THE ABUTMENT DEMOLITION AND REPAIR DRAWINGS.

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

- SUPERSTRUCTURE CONCRETE (APPROX. 450 CUBIC YARDS)
- SUBSTRUCTURE CONCRETE (APPROX. 11 CUBIC YARDS)
- CONCRETE PARAPET (APPROX. 666 LINEAR FEET)

THE PLYWOOD BETWEEN THE BOTTOM FLANGES OF THE BEAMS SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE LAKE COUNTY ENGINEER. IT SHALL BE LOADED INTO THE CONTRACTOR'S TRUCKS, HAULED TO THE LAKE COUNTY ENGINEER'S GARAGE AT 3461 LOST NATION ROAD IN WILLOUGHBY, OHIO 44094, AND UNLOADED THERE IN A PREDETERMINED AREA BY THE CONTRACTOR'S MEN. ALL THE REMOVAL, TRANSPORTATION, AND HANDLING OF THE PLYWOOD AND THE PROTECTION OF THE PUBLIC SHALL BE PAID FOR UNDER ITEM 202 - PORTIONS OF STRUCTURES REMOVED.

THE ABOVE MATERIALS SHALL BE REMOVED IN TWO PHASES AS SHOWN ON SHEET 22/78 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 1/78.

**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 DRAWINGS 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 622 - TEMPORARY CONCRETE BARRIER, BRIDGE MOUNTED**

THE TEMPORARY PRECAST CONCRETE BARRIERS ON THESE BRIDGE DECKS MUST BE ATTACHED TO THE DECKS. ANCHORING DETAILS INDICATED ON SHEET 37/78 SHALL BE USED.

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

**FIELD PAINTING OF NEW STRUCTURAL STEEL, SYSTEM OZEU, AS PER PLAN**

THIS WORK SHALL CONSIST OF SUPPLYING THE MATERIALS, LABOR, AND EQUIPMENT NECESSARY FOR THE CLEANING AND FIELD PAINTING OF 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.

**APPROACH SLAB WIDENING**

ALL MATERIALS (INCLUDING BUT NOT LIMITED TO CLASS C CONCRETE, REINFORCING STEEL, DOWELS, AND PREFORMED EXPANSION JOINT FILLER) AND LABOR REQUIRED IN THE WIDENING OF APPROACH SLABS AS INDICATED IN DETAILS ON SHEET 34/78 OF THE BRIDGE PLANS, SHALL BE INCLUDED FOR PAYMENT IN THE PRICE BID PER SQUARE YARD FOR ITEM 611 IN THE ROADWAY QUANTITIES.

| ESTIMATED QUANTITIES FOR LAK-2-0363L |           |        |          |  |       |       |        |         |
|--------------------------------------|-----------|--------|----------|--|-------|-------|--------|---------|
| ITEM                                 | ITEM EXT. | TOTAL  | UNIT     | DESCRIPTION  | ABUT. | PIERS | SUPER. | GENERAL |
| 202                                  | 11200     | LUMP   |          | Portions of Structure Removed  | —     | —     | —      | LUMP    |
| 509                                  | 11400     | 200    | lb.      | Reinforcing Steel, Grade 60  | —     | —     | —      | 200     |
| 509                                  | 15800     | 56,142 | lb.      | Epoxy Coated Reinforcing Steel, Grade 60                                 | 2,280 | —     | 53,862 | —       |
| 510                                  | 11100     | 140    | EACH     | Dowel Holes  | 140   | —     | —      | —       |
| 511                                  | 45700     | 19     | CU. YD.  | Class C Concrete, Abutments  | 19    | —     | —      | —       |
| 511                                  | 34401     | 250    | CU. YD.  | Class S Concrete, Superstructure, as per plan (SEE SHT. 36)              | —     | —     | 250    | —       |
| 512                                  | 33300     | 17     | SQ. YD.  | Type A Waterproofing   | 17    | —     | —      | —       |
| 513                                  | 20000     | 3,122  | EACH     | Welded Stud Shear Connectors   | —     | —     | 3,122  | —       |
| 516                                  | 11200     | 128    | LIN. FT. | Structural Expansion Joints Including Elastomeric Strip Seals            | —     | —     | 128    | —       |
| 519                                  | 11100     | 60     | SQ. FT.  | Patching Concrete Structures   | 50    | 10    | —      | —       |
| SPECIAL                              | 512 67500 | 426    | SQ. YD.  | Sealing of Concrete Surfaces (See Proposal Note)                         | 80    | —     | 346    | —       |
| SPECIAL                              | 512 67504 | 303    | SQ. YD.  | Sealing of Concrete Surfaces (Non-Epoxy)(See Proposal Note)              | —     | 303   | —      | —       |
| SPECIAL                              | 512 67502 | 85     | SQ. YD.  | Sealing of Concrete Surfaces (Epoxy)(See Proposal Note)                  | 85    | —     | —      | —       |
| SPECIAL                              | 514 00410 | 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          | —     | —     | —      | LUMP    |
| SPECIAL                              | 514 00430 | LUMP   |          | Field Painting of New Structural Steel, Intermediate Coat, System OZEU   | —     | —     | —      | LUMP    |
| SPECIAL                              | 514 00440 | LUMP   |          | Field Painting of New Structural Steel, Finish Coat, System OZEU         | —     | —     | —      | LUMP    |

| ESTIMATED QUANTITIES FOR LAK-2-0363R |           |        |          |  |       |       |        |         |
|--------------------------------------|-----------|--------|----------|--|-------|-------|--------|---------|
| ITEM                                 | ITEM EXT. | TOTAL  | UNIT     | DESCRIPTION  | ABUT. | PIERS | SUPER. | GENERAL |
| 202                                  | 11200     | LUMP   |          | Portions of Structure Removed  | —     | —     | —      | LUMP    |
| 509                                  | 11400     | 200    | lb.      | Reinforcing Steel, Grade 60  | —     | —     | —      | 200     |
| 509                                  | 15800     | 56,142 | lb.      | Epoxy Coated Reinforcing Steel, Grade 60                                 | 2,280 | —     | 53,862 | —       |
| 510                                  | 11100     | 140    | EACH     | Dowel Holes  | 140   | —     | —      | —       |
| 511                                  | 45700     | 19     | CU. YD.  | Class C Concrete, Abutments  | 19    | —     | —      | —       |
| 511                                  | 34401     | 250    | CU. YD.  | Class S Concrete, Superstructure, as per plan (SEE SHT. 36)              | —     | —     | 250    | —       |
| 512                                  | 33300     | 17     | SQ. YD.  | Type A Waterproofing   | 17    | —     | —      | —       |
| 513                                  | 20000     | 3,122  | EACH     | Welded Stud Shear Connectors   | —     | —     | 3,122  | —       |
| 516                                  | 11200     | 128    | LIN. FT. | Structural Expansion Joints Including Elastomeric Strip Seals            | —     | —     | 128    | —       |
| 519                                  | 11100     | 29     | SQ. FT.  | Patching Concrete Structures   | 19    | 10    | —      | —       |
| SPECIAL                              | 512 67500 | 426    | SQ. YD.  | Sealing of Concrete Surfaces (See Proposal Note)                         | 80    | —     | 346    | —       |
| SPECIAL                              | 512 67504 | 302    | SQ. YD.  | Sealing of Concrete Surfaces (Non-Epoxy)(See Proposal Note)              | —     | 302   | —      | —       |
| SPECIAL                              | 512 67502 | 85     | SQ. YD.  | Sealing of Concrete Surfaces (Epoxy)(See Proposal Note)                  | 85    | —     | —      | —       |
| SPECIAL                              | 514 00410 | 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          | —     | —     | —      | LUMP    |
| SPECIAL                              | 514 00430 | LUMP   |          | Field Painting of New Structural Steel, Intermediate Coat, System OZEU   | —     | —     | —      | LUMP    |
| SPECIAL                              | 514 00440 | LUMP   |          | Field Painting of New Structural Steel, Finish Coat, System OZEU         | —     | —     | —      | LUMP    |

|  |        |        |         |                 |         |       |
|--|--------|--------|---------|-----------------|---------|-------|
|  <b>COLPETZER-THOMAS, INC.</b><br>AN ENGINEERING GROUP<br><small>WILLOUGHBY • MENTOR • NORTH CANTON • STEUBENVILLE • LORAIN</small> |        |        |         |                 |         | 21/78 |
| <b>NOTES AND ESTIMATED QUANTITIES</b><br><b>BRIDGE NO. LAK-2-0363 L &amp; R</b><br><b>OVER BEIDLER ROAD</b><br>LAKE COUNTY   |        |        |         |                 |         |       |
| DESIGNED   | DRAWN  | TRACED | CHECKED | REVIEWED, DATE  | REVISED |       |
| B.J.A.   | J.L.J. | J.L.J. | R.J.C.  | J.E.A. 11/15/88 |         |       |