

| ESTIMATED QUANTITIES |         |            |   |            |        |              |          |
|----------------------|---------|------------|---|------------|--------|--------------|----------|
| ITEM                 | TOTAL   | UNIT       | DESCRIPTION   | ABUT-MENTS | PIERS  | SUPER STRUC. | GEN ERAL |
| 202                  | Lump    |            | Structures Removed, As per plan   |            |        |              | Lump     |
| 503                  | Lump    |            | Cofferdams, Cribbs and Sheeting   |            |        |              | Lump     |
| 503                  | 517     | Cubic Yds. | Unclassified Excavation   | 517        |        |              |          |
| 503                  | 266     | Cubic Yds. | Unclassified Excavation Including Rock  |            | 266    |              |          |
| 503                  | 58      | Cubic Yds. | Shale Excavation  |            | 58     |              |          |
| 505                  | Lump    |            | Pile Driving Equipment Mobilization   |            |        |              | Lump     |
| 507                  | 1,505   | Lin. Ft.   | Steel Piles, HP 12x53, As per plan  | 1,505      |        |              |          |
| 507                  | 720     | Lin. Ft.   | Steel Piles, HP 14x89, As per plan  |            | 720    |              |          |
| 507                  | 285     | Lin. Ft.   | Prebored Holes, As per plan   | 285        |        |              |          |
| 507                  | 57      | Each       | Steel Points  | 21         | 36     |              |          |
| 509                  | 68,196  | Lb.        | Reinforcing Steel, Grade 60   | 12,365     | 55,831 |              |          |
| 511                  | 296     | Cubic Yds. | Class C Concrete, Piers Above Footings  |            | 296    |              |          |
| 511                  | 151     | Cubic Yds. | Class C Concrete, Abut. Above Footings  | 151        |        |              |          |
| 511                  | 245     | Cubic Yds. | Class C Concrete, Footings  | 93         | 152    |              |          |
| 511                  | 652     | Cubic Yds. | Class S Concrete, Superstructure, as per plan. See Prop. note.                            | 7          |        | 645          |          |
| 513                  | 509,100 | Lb.        | Structural Steel (AISC Category III), A572  |            |        | 509,100      |          |
| 513                  | 3,645   | Each       | Welded Stud Shear Connectors  |            |        | 3,645        |          |
| 514                  | 509,100 | Lb.        | Field Painting of New Structural Steel, SYSTEM A, APP                                     |            |        | 509,100      |          |
| 516                  | 40.44   | Lin. Ft.   | Structural Expansion Joint Including Elastomeric Compression Seals                        |            |        | 40.44        |          |
| 516                  | 43.19   | Lin. Ft.   | Modular Expansion Joint Including Elastomeric Compression Seals & Steel Extrusions        |            |        | 43.19        |          |
| 517                  | 883     | Lin. Ft.   | Railings (Concrete Parapet With Double Pipe Rail)   | 93         |        | 790          |          |
| 518                  | 104     | Cubic Yds. | Porous Backfill   | 104        |        |              |          |
| 518                  | 74      | Lin. Ft.   | 6" Perforated Helical Corrugated Steel Pipe, 707.01                                       | 74         |        |              |          |
| 518                  | 42      | Lin. Ft.   | 6" Nonperforated Helical Corrugated Steel Pipe Including Specials, 707.01                 | 42         |        |              |          |
| 601                  | 349     | Cubic Yds. | Dumped Rock Fill, Type "D"  | 349        |        |              |          |
| 601                  | 919     | Cubic Yds. | Grouted Rock Channel Protection, Type "A", as per plan.                                   | 919        |        |              |          |
| 824                  | 129,475 | Lb.        | Epoxy Coated Reinforcing Steel, Grade 60  | 7,762      |        | 121,713      |          |
| * 511                | 652     | Cubic Yds. | Class "CS" Concrete, Superstructure. See proposal note.                                   | 7          |        | 645          |          |
| * 511                | 652     | Cubic Yds. | Class "S" Concrete, Superstructure - using shrinkage compensating cement. See prop. note. | 7          |        | 645          |          |
| Special              | 1113    | Sq. Yd.    | Sealing of Concrete Surfaces (See Proposal Note)  | 72         | 593    | 448          |          |

\* Alternate Bid Items

ITEM 514 - FIELD PAINTING OF NEW STRUCTURAL STEEL, SYSTEM A, APP  
MATERIALS USED FOR THIS ITEM SHALL BE MANUFACTURED BY  
THE COMPANY WHICH MANUFACTURED THE SHOP PRIME COAT SO  
THAT COMPATIBILITY OF COATS IS INSURED.

Item 601 - Grouted Rock Channel Protection, Type A, as per plan.  
Fabric filter shall be used.

QUANTITY CALCULATIONS  
BY R.C.K. DATE 10-4-84  
CHKD. R.J.P. DATE 10-18-84  
WOODRUFF, INC.

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| WOODRUFF, INC.<br>CONSULTING ENGINEERS<br>CLEVELAND, OHIO     |  |
| ESTIMATED QUANTITIES<br>U.S. ROUTE 20 OVER<br>THE GRAND RIVER |  |
| BR. NO. - LAK-20-1723   | FROM STA. 18+91.00<br>TO STA. 22+89.56 |
| LAKE COUNTY   | OHIO                                   |
| MADE R.C.K. DATE 10-84  | TRACED MAG. DATE 10-84                 |
| CHECKED R.J.P. DATE 10-84                                     | REVIEWED A.J.M. DATE 10-84             |
| REVISED 7-3-86  | SHEET 5 / 22                           |