<u>erdrused work</u>

THE EROSION AREAS AT THE NORTH ABUTMENT AND THE FOOTER OF PIER Nº 3 ARE TO BE REPAIRED AND PROTECTED FROM FUTURE EROSION.

EXISTING STRUCTURE VERIFICATION: DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND/OR FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05 AND 105.02.

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

PLANS OF EXISTING STRUCTURES ARE AVAILABLE FOR EXAMINATION AT THE OHIO DEPARTMENT OF TRANSPORTATION; DISTRICT 12 OFFICE; 10100 BROADWAY AVENUE; GARFIELD HEIGHTS, OHIO.

RIGHT OF WAY

ALL WORK SHALL BE PERFORMED WITHIN THE EXISTING RIGHT-OF-WAY AND TEMPORARY WORK AGREEMENT.

CONTINGENCY QUATITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR PLAN ITEMS SET UP TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER.

UTILITIES

THE CONTRACTOR'S ATTENTION SHALL BE DIRECTED TO SECTION 105.06 OF THE CMS.

<u>LIMITATION OF OPERATIONS</u>

NO LANE CLOSURES SHALL BE IMPLEMENTED OR IN PLACE DURING NIGHTTIME HOURS (8:00 P.M. TO 6:00 A.M.)

THE CONTRACTOR'S ATTENTION IS SPECIFICALLY DIRECTED TO SECTION 105.07 OF THE CMS.

ITEM SPECIAL: CONCRETE FABRIC BAGS

A. DESCRIPTION

ALL WORK SHALL CONFORM TO THESE PLANS AND NOTES.

THIS ITEM SHALL CONSIST OF FURNISHING, FIELD TAILORING AS NECESSARY, AND INSTALLING FABRIC CONCRETE BAGS IN ACCORDANCE WITH THESE SPECIFICATIONS AND REASONABLY CLOSE CONFORMANCE WITH THE DESIGN AND DIMENSIONS SHOWN ON THE PLANS. THE CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT, MATERIALS INCLUDING FABRIC BAGS, CONCRETE GROUTING, DOWEL BARS AND ALL OTHER ITEMS OF WORK, NOT ITEMIZED AS SEPARATE ITEMS, NECESSARY TO PROVIDE A COMPLETE INSTALLATION OF FABRIC CONCRETE BAGS.

B. MATERIALS

FABRIC BAG

THE FABRIC BAG SHALL BE MADE OF HIGH STRENGTH PERMEABLE FABRIC AS MANUFACTURED BY CONSTRUCTION TECHNIQUES, INC., 1700 THE SUPERIOR BLDG CLEVELAND, OHIO 44114. TELEPHONE NUMBER (216) 623-0697, SEAMS SHALL BE FOLDED AND DOUBLED STITCHED. EACH BAG SHALL BE PROVIDED WITH A SELF CLOSING INLET VALVE TO ACCOMODATE INSERSION OF CONCRETE PUMPING HOSE.

GROUT

CONCRETE GROUT SHALL CONSIST OF MIXTURE OF CEMENT, AGGREGATE, ADMIXTURE, AND WATER SO PROPORTIONED AS TO PROVIDE A PUMPABLE MIXTURE. THE CONCRETE SHALL BE MACHINE MIXED ACCORDING TO CMS 499, EXCEPT THAT 499.03 DOES NOT APPLY. THE CONCRETE SHALL BE PROPORTIONED OF MATERIALS SPECIFIED IN CMS 499.02 TO PROVIDE A MINIMUM CYLINDER STRENGTH OF 3,000 PSI IN 28 DAYS, AS DETERMINED FROM TESTING OF AT LEAST 3 CYLINDERS BY THE LABORATORY

REINFORCING STEEL DOWELS

THE REINFORCING STEEL DOWELS SHALL BE EPOXY COATED REBAR DOWELS AND CONFORM TO THE REQUIRMENTS OF SS 824.

C. CONTRACTOR QUALIFICATIONS

THE CONTRACTOR SHALL FURNISH RECORDS OF HIS PAST EXPERIENCE IN PERFORMING THIS TYPE OF WORK. HE SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A DESCRIPTION OF THE MATERIALS TO BE USED AND SCHEDULE OF INSTALLATION SEQUENCE.

D. EQUIPMENT

PUMPING CAPACITY SHOULD BE ABOUT 12 CU. YDS. PER HOUR. A MINIMUM 2 IN. PIPE OR HOSE SHALL BE USED BETWEEN THE PUMP AND THE FABRIC BAGS.

E. INSTALLATION

INSTALLATION SHALL BE DONE UNDERWATER SO THAT THE CHANNEL IS NOT RESTRICTED BY COFFERDAMS. INSTALLATION SHALL BE IN ACCORDANCE WITH THE METHOD PROVIDED BY THE REPRESENTATIVE OF THE FABRIC CONCRETE BAGS MANUFACTURED, WHO SHALL ACT THROUGH THE ENGINEER.

INSERT THE INJECTION PIPE THROUGH A SMALL SLIT CUT IN THE UPPER LAYER OF FABRIC. WRAP A PIECE OF BURLAP AROUND THE INSERT TO ACT AS A PACKER. USE CARE TO AVOID GROUT SPILLAGE.

IN FLOWING WATER, THE UPSTREAM EDGE OF THE MAT SHALL BE PUMPED FIRST. MAXIMUM ALLOWABLE WATER VELOCITY USING ROUTINE INSTALLATION PROCEDURES IS ABOUT 3 FT. PER SECOND.

DO NOT WALK ON THE BAG FOR ABOUT ONE HOUR AFTER PUMPING OR WHEN FOOTPRINTS WILL NOT LEAVE INDENTATIONS.

REMOVE BURLAP FROM INSERT HOLES AND SMOOTH MORTAR BY HAND.

F. INSPECTION

THE FABRIC CONCRETE BAG MANUFACTURER SHALL PROVIDE A REPRESENTATIVE WHO SHALL PROVIDE ON-SITE TECHNICAL ASSISTANCE TO THE ENGINEER AND ENSURE THAT THE CONTRACTOR FULLY UNDERSTANDS THE PROPER CONSTRUCTION PROCEDURES. THE REPRESENTATIVE SHALL PROVIDE THE ENGINEER A WRITTEN INSPECTION REPORT OF ALL MEASUREMENTS AND FINDINGS. THE REPRESENTATIVE SHALL BE A REGISTERED PROFESSIONAL ENGINEER OR WORK UNDER THE DIRECTION OF A REGISTERED PROFESSIONAL ENGINEER. THE FINAL INSPECTION REPORT SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, A COPY OF THE REPORT SHALL BE SUBMITTED TO THE BUREAU OF BRIDGES ATTN. FOUNDATIONS ENGINEER.

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G. PAYMENT

PAYMENT FOR THE MATERIALS, LABOR AND EQUIPMENT NECESSARY TO COMPLETE THE PLACEMENT OF ALL ACCEPTED FABRIC BAGS SHALL BE MADE UNDER THE LUMP SUM PRICE BID.

THE ACCEPTED QUANTITIES OF THE FABRIC BAG SYSTEM SHALL BE PAID FOR AT THE FOR COMPLETE PLACEMENT OF THE BAGS. PAYMENT SHALL BE FULL COMPENSATION FOR LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE FABRIC BAG SYSTEM.

PAYMENT WILL BE MADE UNDER:

ITEM SPECIAL UNIT

DESCRIPTION

FABRIC CONCRETE BAGS

ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION

THIS WORK SHALL CONSIST OF REMOVING THE HIGH SILTED AREA AROUND PIER Nº 3. THE REMOVAL SHALL BE AS SHOWN IN THESE PLANS AND AS DIRECTED BY THE ENGINEER. IT IS IMPORTANT THAT ONLY NECESSARY EXCAVATION BE PERFORMED AND THAT NO SHALE UNDER ANY CIRCUMSTANCES BE REMOVED.

A CONTINGENCY AMOUNT OF I CUBIC YARDS HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

> STATE OF OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 12 BRIDGE DEPARTMENT

GENERAL NOTES BRIDGE Nº LAK -528-0192

LAKE COUNTY DESIGNED TRACED CHECKED REVIEWS B. M. T. K. Z. D. D. W. L. G.W.M. DATE 6-87 DATE 8/87