

| REVISIONS |             |      |
|-----------|-------------|------|
| REV. NO.  | DESCRIPTION | DATE |
|           |             |      |

**PAY ITEM NOTES**

**1) CLSM BACKFILL:**

CLSM BACKFILL WILL BE USED UNDER NEW APPROACH SLABS AS SHOWN IN THE PLANS. CLSM BACKFILL SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS (SECTION 501).

ALL COSTS INCLUDING LABOR, EQUIPMENT, MATERIAL, EXCAVATION AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE PRICE BID PER CUBIC YARD OF "CLSM BACKFILL".

**2) APPROACH SLAB:**

PAY ITEM "APPROACH SLAB" CONSISTS OF REMOVING THE ROADWAY TO THE LIMITS SHOWN IN THE PLANS AND AS DIRECTED BY THE ENGINEER. CONSTRUCT THE APPROACH SLAB AS SHOWN IN THE PLANS. ALL COSTS OF THE REPAIR INCLUDING MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE PRICE BID PER SQUARE YARD OF "APPROACH SLAB".

**3) RAPID CURE JOINT SEALANT:**

RAPID CURE JOINT SEALANT SHALL CONSIST OF PLACING BACKER ROD AND SEALANT AT EXISTING CONSTRUCTION JOINTS AS SHOWN AND NOTED IN THE PLANS.

THE JOINT SHALL BE SEALED WITH RAPID CURE JOINT SEALANT IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (SECTION 504 AND SECTION 701).

ALL COSTS INCLUDING LABOR, MATERIALS, EQUIPMENT, CLEANING, SAWING AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SHOWN AND NOTED WILL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF "RAPID CURE JOINT SEALANT".

**4) ELASTOMERIC MORTAR:**

THIS ITEM WILL BE USED AT THE ENDS OF NEW APPROACH SLABS TO FILL ANY VOID BETWEEN THE NEW APPROACH SLAB AND EXISTING ASPHALT PAVEMENT AS DIRECTED BY THE ENGINEER. THE QUANTITY IS AN ESTIMATE.

**5) MULTIPLE LAYER POLYMER CONCRETE OVERLAY:**

THIS ITEM IS FOR OVERLAYING THE BRIDGE DECK SLAB AND APPROACH SLABS ACCORDING TO SECTION 505 OF THE SPECIFICATIONS, AFTER ALL CONCRETE PATCHING IS COMPLETED.

THE QUANTITY SHOWN INCLUDES 170 SQUARE YARDS IN EXCESS OF WHAT IS REQUIRED TO COVER THE DECK AND APPROACH SLABS. THE EXTRA AMOUNT IS FOR SURFACE ROUGHNESS REPAIRS.

**6) SPECIAL CONCRETE FINISH:**

AFTER ALL REPAIR TO THE CONCRETE PARAPETS HAVE BEEN COMPLETED, THE EXPOSED SURFACES (ROADWAY SIDE) OF THE PARAPETS SHALL HAVE A NEW CONCRETE SURFACE FINISH APPLIED (THE ENTIRE LENGTH OF THE PARAPETS).

THE NEW CONCRETE SURFACE FINISH SHALL BE A CLASS 6 MORTAR FINISH SATISFYING THE REQUIREMENTS OF SECTION 509.04G(6) OF THE STANDARD SPECIFICATIONS.

ALL COST ASSOCIATED WITH THE APPLICATION OF NEW CONCRETE FINISH INCLUDING MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER LUMP SUM OF "SPECIAL CONCRETE FINISH".

**7) COLLECTION AND HANDLING OF WASTE & PAINTING EXISTING STRUCTURE:**

THESE ITEMS ARE FOR CLEANING AND PAINTING THE FOLLOWING SURFACES:

- 5 FEET OF ALL BEAM ENDS AT ABUTMENTS.
- ALL END DIAPHRAGMS AT ABUTMENTS.
- ALL EXPANSION BEARINGS AT ABUTMENTS.
- ALL FIELD SPLICES (THIS INCLUDES THE SPLICE PLATES AND 2 1/2 FEET OF BEAM SECTION ON EITHER SIDE OF  $\phi$  SPLICE).

ALL SURFACES TO BE PAINTED WILL BE PREPARED ACCORDING TO SSPC-SP10 SPECIFICATIONS. ONCE CLEANED, PROVIDE AN ORGANIC ZINC/EPOXY/URETHANE (OZ-E-U) SYSTEM (FOR PRIMING AND PAINTING) THAT MEETS REQUIREMENT OF SECTION 730 OF THE STANDARD SPECIFICATIONS (ONLY ONE COAT OF PRIMER IS REQUIRED FOR TOP OF BEAM ENDS AND DIAPHRAGMS IN CONTACT WITH CONCRETE) (THE EXISTING STEEL IS WEATHERING STEEL AND HAS NOT BEEN PREVIOUSLY PAINTED).

USE A PAINT COLOR \*FEDERAL STANDARD 595 COLOR FS 20075\* TO MATCH THE EXISTING WEATHERING STEEL.

ALL COSTS ASSOCIATED WITH CLEANING AND PAINTING WILL BE INCLUDED IN LUMP SUM OF \*COLLECTION AND HANDLING OF WASTE\* AND \*PAINTING EXISTING STRUCTURE\*.

SSPC QP-1 CERTIFICATION WILL BE REQUIRED.

**8) CLASS B BRIDGE DECK REPAIR:**

THIS ITEM CONSISTS OF BRIDGE DECK AREAS THAT ARE UNSOUND AND TO BE REMOVED TO A DEPTH DESIGNATED BY THE ENGINEER. ALL COSTS OF THE REPAIR INCLUDING MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE PRICE BID PER SQUARE YARD OF "CLASS B BRIDGE DECK REPAIR".

**9) CLASS C BRIDGE DECK REPAIR:**

THIS ITEM CONSISTS OF BRIDGE DECK AREAS THAT ARE UNSOUND AND TO BE REMOVED TO FULL DEPTH AS DESIGNATED BY THE ENGINEER. ALL COSTS OF THE REPAIR INCLUDING MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE PRICE BID PER SQUARE YARD OF "CLASS C BRIDGE DECK REPAIR".

**10) PNEUMATICALLY PLACED MORTAR:**

ITEM "PNEUMATICALLY PLACED MORTAR" SHALL CONSIST OF CONCRETE SURFACE REPAIRS OF THE SUBSTRUCTURE AND CONCRETE PARAPET AS DIRECTED BY THE ENGINEER. THE ACTUAL EXTENT OF THE REPAIRS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER. THE REPAIRS SHALL BE IN ACCORDANCE WITH SECTION 521 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND IN A MANNER APPROVED BY THE ENGINEER. THE REMOVAL OF LOOSE CONCRETE SHALL BE DONE USING HAND TOOLS. POWER TOOLS WILL NOT BE ALLOWED UNLESS HAND TOOLS PROVE INCAPABLE OF EXCAVATING ALL DETERIORATED CONCRETE TO SOUND CONCRETE AS APPROVED BY THE ENGINEER. SHOULD POWER TOOLS BE NECESSARY, POWER TOOLS SHALL BE OF SUCH SIZE THAT THEIR USE DOES NOT CAUSE DAMAGE TO THE SOUND CONCRETE. ANY DAMAGE DONE TO THE EXISTING REINFORCING STEEL DURING THE REMOVAL PROCESS SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE TO THE SATISFACTION OF THE ENGINEER. ANY DETERIORATED REINFORCING STEEL WITH A SECTION LOSS GREATER THAN 50%, AS DETERMINED BY THE ENGINEER, SHALL BE REPORTED TO THE BRIDGE ENGINEER FOR REMEDIAL ACTION PRIOR TO MORTAR APPLICATION, BLAST CLEAN THE CONCRETE SURFACE AND REINFORCING STEEL FREE OF DEBRIS AND CORROSION. APPLY PNEUMATICALLY PLACED MORTAR TO REPLACE DETERIORATED CONCRETE. BUILD UP MORTAR TO MATCH THE ORIGINAL LINES OF THE CURBS AND PIERS. THE CONTRACTOR MAY PROPOSE AND USE AS AN ALTERNATE ONE OF THE FOLLOWING REPAIR METHODS:

- (1) CAST-IN-PLACE CONCRETE
- (2) PRE-PLACED AGGREGATE CONCRETE
- (3) FORMED AND PUMPED CONCRETE AND MORTAR
- (4) TROWELING AND DRY-PACKING OF REPAIR MORTAR

THE CONTRACTOR SHALL SUBMIT A PROPOSED WORK PLAN OF THE REPAIR METHOD TO BE USED TO THE ENGINEER FOR HIS APPROVAL. THE WORK PLAN SHOULD INCLUDE SURFACE PREPARATION METHODS, PATCHING MATERIAL, BONDING AGENTS, MATERIAL PLACING METHODS, AND FINISHING METHODS. THE CONTRACTOR SHALL TEST REPAIR AN AREA TO VERIFY THE EFFECTIVENESS OF THE PROPOSED REPAIR METHOD PRIOR TO COMMENCEMENT OF THE WORK. FAULTY REPAIRS SHALL BE REPLACED AT THE CONTRACTORS EXPENSE. ALL COSTS INCLUDING LABOR, MATERIAL, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE PRICE BID PER SQUARE YARD OF "PNEUMATICALLY PLACED MORTAR" (APPROXIMATELY 25 SQUARE YARDS FOR SUBSTRUCTURE, 100 SQUARE YARDS FOR PARAPETS ).

**11) CARBON FIBER-REINFORCED POLYMER**

THIS ITEM IS FOR APPLYING TWO LAYERS OF CARBON FIBER-REINFORCED POLYMER TO WEST COLUMN TOP OF PIER 2 OF THE BRIDGE AT LOCATIONS AND EXTENT SHOWN IN THE PLANS AND AS APPROVED BY THE ENGINEER, IN ACCORDANCE WITH SPECIAL PROVISIONS 524-3. THE QUANTITY SHOWN IS APPROXIMATE. THE EXTENT WILL BE FIELD DETERMINED WITH THE APPROVAL OF THE ENGINEER.

**12) CORROSION INHIBITOR (SURFACE APPLIED)**

THIS ITEM IS FOR APPLYING CORROSION INHIBITOR (SURFACE APPLIED) TO A) WEST COLUMN TOP OF PIER 2, B) BRIDGE SEATS, PEDESTALS AND BACKWALLS AT BOTH ABUTMENTS (APPROXIMATELY 10 SQUARE YARDS FOR COLUMN TOP, 120 SQUARE YARDS FOR ABUTMENTS) (AS DIRECTED BY THE ENGINEER) IN ACCORDANCE WITH SPECIAL PROVISIONS 535-1. THE QUANTITY SHOWN IS APPROXIMATE. APPLY CORROSION INHIBITOR PRIOR TO PLACEMENT OF PNEUMATICALLY PLACED MORTAR.

**13) REPAIR BRIDGE ITEM (TYPE A)**

PAY ITEM "REPAIR BRIDGE ITEM (TYPE A)" IS FOR REPLACEMENT OF THE EXISTING EXPANSION JOINTS AT THE ABUTMENTS AS SHOWN IN THE PLANS.

- THIS ITEM CONSISTS OF:
- REMOVING THE EXISTING EXPANSION JOINT ALONG WITH A PORTION OF DECK SLAB ADJACENT TO THE JOINT.
  - APPLYING A COAT OF INORGANIC ZINC PRIMER TO THE TOP OF THE EXPOSED PORTION OF THE BEAMS AND DIAPHRAGMS.
  - INSTALLING NEW EXPANSION DEVICE (SEJ) ALONG WITH PLACEMENT OF REINFORCEMENT AND CONCRETE.

CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. ALL COSTS OF THE REPAIR INCLUDING REMOVAL, DISPOSAL, MATERIAL, LABOR, WELDING, PAINT, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SHOWN AND NOTED SHALL BE INCLUDED IN THE PRICE BID PER EACH OF "REPAIR BRIDGE ITEM (TYPE A)".

| 31701(04) PAY QUANTITIES    |      |                                            |           |          |
|-----------------------------|------|--------------------------------------------|-----------|----------|
| 0200 BRIDGE 'A' - NBI 19267 |      |                                            |           |          |
| ITEM                        |      | DESCRIPTION                                | UNIT      | QUANTITY |
| 501(G)                      | 6309 | CLSM BACKFILL                              | (1) CY    | 64.00    |
| 504(A)                      | 1304 | APPROACH SLAB                              | (2) SY    | 190.00   |
| 504(G)                      | 6390 | RAPID CURE JOINT SEALANT                   | (3) LF    | 753.00   |
| 504(H)                      | 6389 | ELASTOMERIC MORTAR                         | (4) CF    | 10.00    |
| 505(C)                      | 6075 | MULTIPLE LAYER POLYMER CONCRETE OVERLAY    | (5) SY    | 2,100.00 |
| 509                         | 6153 | SPECIAL CONCRETE FINISH                    | (6) LSUM  | 1.0      |
| 512(A)                      | 1323 | PAINTING EXISTING STRUCTURE                | (7) LSUM  | 1.0      |
| 512(B)                      | 6303 | COLLECTION AND HANDLING OF WASTE           | (7) LSUM  | 1.0      |
| 513(B)                      | 6019 | CLASS B BRIDGE DECK REPAIR                 | (8) SY    | 80.00    |
| 513(C)                      | 6020 | CLASS C BRIDGE DECK REPAIR                 | (9) SY    | 40.00    |
| 521(A)                      | 6210 | PNEUMATICALLY PLACED MORTAR                | (10) SY   | 125.00   |
| 524(A)                      | 6610 | (SP) CARBON FIBER-REINFORCED POLYMER       | (11) SF   | 160.00   |
| 535                         | 6130 | (SP) CORROSION INHIBITOR (SURFACE APPLIED) | (12) SY   | 130.00   |
| 540                         | 4515 | (PL) REPAIR BRIDGE ITEM (TYPE A)           | (13) EACH | 2.0      |

| 31701(04) PAY QUANTITIES |      |              |      |          |
|--------------------------|------|--------------|------|----------|
| 0640 CONSTRUCTION        |      |              |      |          |
| ITEM                     |      | DESCRIPTION  | UNIT | QUANTITY |
| 641                      | 1399 | MOBILIZATION | LSUM | 1.00     |

|                                                                            |  |                              |                    |     |                |
|----------------------------------------------------------------------------|--|------------------------------|--------------------|-----|----------------|
| <b>GENERAL NOTES AND SUMMARY OF PAY QUANTITIES (BRIDGE) (SHEET 2 OF 2)</b> |  |                              | GRADY COUNTY       |     |                |
|                                                                            |  |                              | Design             | N/A | N/A            |
|                                                                            |  |                              | Detail             | DAH | 05/16          |
|                                                                            |  |                              | Check              |     |                |
|                                                                            |  |                              | Squad: HARJO       |     |                |
|                                                                            |  |                              | Engr: MOLLA-ESMAIL |     |                |
| STATE OF OKLAHOMA                                                          |  | DEPARTMENT OF TRANSPORTATION |                    |     |                |
|                                                                            |  | JOB/PIECE NO. 31701(04)      |                    |     | SHEET NO. AB02 |