

REVISIONS		
REV. NO.	DESCRIPTION	DATE

GENERAL NOTES

SPECIFICATIONS:

COMPLY WITH THE REQUIREMENTS OF THE 2009 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EXCEPT AS MODIFIED BY THE PLANS AND SPECIAL PROVISIONS.

PLANS:

CONSTRUCTION PLANS FOR THE EXISTING STRUCTURES, MAY BE OBTAINED FROM THE REPRODUCTIONS BRANCH OF THE OKLAHOMA DEPARTMENT OF TRANSPORTATION.

REPRODUCTION BRANCH
OKLAHOMA DEPARTMENT OF TRANSPORTATION
200 NE 21ST STREET
OKLAHOMA CITY, OKLAHOMA 73105

ASK FOR: MAF-593(223) MAYES COUNTY,
US 412 OVER US 69

VERIFICATION OF EXISTING CONDITIONS:

ALL DIMENSIONS OF THE EXISTING BRIDGE COMPONENTS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS NECESSARY TO CONSTRUCT THE NEW MATERIAL AND SHALL BE SOLELY RESPONSIBLE FOR THE ACCURACY THEREOF.

BIDDERS SHALL FULLY INFORM THEMSELVES OF THE NATURE OF THE WORK AND CONDITIONS UNDER WHICH IT WILL BE PERFORMED. THE CONTRACTOR SHALL ADOPT METHODS CONSISTENT WITH GOOD CONSTRUCTION PRACTICE AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO ANY EXISTING BRIDGE STRUCTURE OR ROADWAY. ANY DAMAGE TO THE BRIDGE STRUCTURE OR ROADWAY DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, TO THE SATISFACTION OF THE ENGINEER.

DESCRIPTION OF WORK:

THE WORK UNDER THIS CONTRACT CONSISTS PRIMARILY OF THE REPAIR OF A PRESTRESSED CONCRETE BEAM BY THE APPLICATION OF PNEUMATICALLY PLACED MORTAR AND CARBON FIBER WRAP AS SHOWN IN THE PLANS.

CARE SHALL BE TAKEN TO ENSURE THAT NO DAMAGE IS CAUSED TO THE TRAFFIC DURING THESE ACTIONS. NECESSARY EQUIPMENT WILL BE USED AS APPROVED BY THE ENGINEER. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE SAFETY OF THE TRAVELING PUBLIC AND THE ADEQUACY OF THE REPAIRS.

REMOVED MATERIAL:

ALL MATERIAL REMOVED DURING THIS PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED IN A MANNER APPROVED BY THE ENGINEER.

PNEUMATICALLY PLACED MORTAR

THE PAY ITEM "PNEUMATICALLY PLACED MORTAR" CONSISTS OF REPAIRING THE SURFACE AREA OF THE SUBSTRUCTURE.

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 2009 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND IN A MANNER APPROVED BY THE ENGINEER.

THE REMOVAL OF DAMAGED CONCRETE SHALL BE DONE USING HAND TOOLS. POWER TOOLS WILL NOT BE ALLOWED UNLESS HAND TOOLS PROVE INCAPABLE OF EXCAVATING ALL DAMAGED CONCRETE TO SOUND CONCRETE AND AS APPROVED BY THE ENGINEER.

SHOULD POWER TOOLS BE NECESSARY, POWER TOOLS SHALL BE OF A SIZE APPROVED BY THE ENGINEER SUCH 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 CONTRACTOR'S 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 DAMAGED CONCRETE. BUILD UP MORTAR TO MATCH THE ORIGINAL LINES AND GRADES OF THE SUBSTRUCTURE.

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 CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER.

ALL COSTS INCLUDING LABOR, EQUIPMENT, MATERIAL, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE PRICE BID PER SQUARE YARD OF "PNEUMATICALLY PLACED MORTAR".

CARBON FIBER-REINFORCED POLYMER:

THE PAY ITEM "CARBON FIBER-REINFORCED POLYMER" CONSISTS OF WRAPPING THE LENGTH OF THE AREA REPAIRED ON SPAN NO. 1, BEAMS 1 AS SHOWN IN THE PLANS. REPAIRED BEAMS SHALL BE WRAPPED FROM THE BOTTOM OF BEAM WEB TO THE BOTTOM OF THE BEAM WEB ON THE OPPOSITE SIDE OF THE BEAM COVERING THE ENTIRE BEAM FLANGE AS SHOWN IN THE PLANS.

ALL UNSOUND CONCRETE ON THE PRESTRESSED CONCRETE BEAMS SHALL BE REMOVED AND PATCHED PRIOR TO THE CARBON FIBER-REINFORCED POLYMER WRAP. (SEE "PNEUMATICALLY PLACED MORTAR" NOTE). THE PAY QUANTITY SHOWN IS FOR AREA TO BE REPAIRED. THE CONTRACTOR SHALL APPLY ONE (1) LAYER OF CARBON FIBER MATERIAL TO THE AREA AS SHOWN ON THE PLANS.

ALL COSTS FOR COMPLETING THE WORK AS SPECIFIED INCLUDING LABOR, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE REPAIR SHALL BE INCLUDED IN THE UNIT BID PRICE PER SQUARE FOOT OF "CARBON FIBER-REINFORCED POLYMER".

CORROSION INHIBITOR:

THE WORK CONSISTS OF TREATING CONCRETE SURFACES WITH A PENETRATING CORROSION INHIBITOR BEFORE STARTING BRIDGE DECK REPLACEMENT WORK. SUBMIT TO THE ENGINEER A WORK PLAN DESCRIBING THE TREATMENT PROCEDURES TO BE USED. CORROSION INHIBITOR SHALL BE APPLIED TO ALL AREAS RECEIVING CLASS AA CONCRETE AND AS DIRECTED BY THE ENGINEER.

ALL COSTS FOR COMPLETING THE WORK AS SPECIFIED INCLUDING MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE PRICE BID PER SQUARE YARD OF "CORROSION INHIBITOR".

ENVIRONMENTAL NOTE

MIGRATORY BIRD:

MIGRATORY BIRDS ARE PROTECTED BY THE FEDERAL MIGRATORY BIRD TREATY ACT. MANY BIRDS COMMONLY USE BRIDGES AND CULVERTS FOR NESTING. THE NESTING SEASON FOR MOST BIRD SPECIES EXTENDS FROM APRIL 1 TO AUGUST 31. NO SURVEY WAS DONE ON THIS PROJECT. THE RESIDENT ENGINEER SHALL CONTACT THE ODOT BIOLOGIST AT 405-521-2515 IF ANY BIRD USE OF THE EXISTING STRUCTURES IS OBSERVED. IF BIRDS ARE OBSERVED THEN PAINTING, REPAIR, RETROFIT, REHABILITATION, OR DEMOLITION OF THE EXISTING BRIDGE/STRUCTURES SHALL BE CONDUCTED BETWEEN SEPTEMBER 1, AND MARCH 31, WHEN MIGRATORY BIRD NESTS ARE NOT OCCUPIED.

33366(04)		PAY QUANTITIES		MAYES COUNTY	
ITEM		DESCRIPTION	UNIT	QUANTITY	
0500		BRIDGE 'A' - NBI 21690 - US 412 OVER US 69			
521(A)	6210	PNEUMATICALLY PLACED MORTAR	SY	1.00	
524(A)	6610	(SP) CARBON FIBER-REINFORCED POLYMER	SF	11.20	
535	6130	(SP) CORROSION INHIBITOR (SURFACE APPLIED)	SY	1.00	

33366(04)		PAY QUANTITIES		MAYES COUNTY	
ITEM		DESCRIPTION	UNIT	QUANTITY	
0640		CONSTRUCTION			
641	1399	MOBILIZATION	L SUM	1.00	

BRIDGE A US 412 OVER US 69		MAYES COUNTY		Design		
GENERAL NOTES AND PAY ITEMS (BRIDGE)				Detail	NOW	08/17
				Check	JLL	9/17
				Squad:	MAYFIELD	
				Engr:	ELYAZGI	
STATE OF OKLAHOMA		DEPARTMENT OF TRANSPORTATION		JOB/PIECE NO. 33366(04)		SHEET NO. AB01