

PNEUMATICALLY PLACED MORTAR:

ITEM "PNEUMATICALLY PLACED MORTAR" CONSISTS OF REPAIRING THE EXISTING BRIDGE SUBSTRUCTURE IN AREAS AS DETERMINED BY THE ENGINEER AND IN ACCORDANCE WITH SECTION 521 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. SHOULD POWER TOOLS BE NECESSARY FOR REMOVAL OF LOOSE CONCRETE, 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 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 DETERIORATED CONCRETE. BUILD UP MORTAR TO MATCH THE ORIGINAL LINES AND GRADES OF THE PIER CAP OR ABUTMENT.

REPAIR MATERIALS:

AFTER EXISTING CONCRETE HAS BEEN REMOVED AND REINFORCING AS BEEN BLASTED CLEAN, IF 50% OR MORE OF THE CIRCUMFERENCE OF THE PRIMARY REINFORCEMENT IS EXPOSED, AS DETERMINED BY THE ENGINEER, THE REMOVED CONCRETE WILL BE REPLACED WITH CLASS AA CONCRETE. ALL OTHER AREAS MAY BE REPAIRED WITH PNEUMATICALLY PLACED MORTAR.

CLASS AA CONCRETE REPAIRS MAY BE CAST-IN-PLACE CONCRETE OR FORMED AND PUMPED CONCRETE. USE MORTAR FOR THE PATCHING MATERIAL. THE CONTRACTOR MAY SUBSTITUTE CLASS AA CONCRETE FOR ANY REPAIR THAT ONLY REQUIRES PNEUMATICALLY PLACED MORTAR AT NO ADDITIONAL EXPENSE TO THE DEPARTMENT.

PHASED CONSTRUCTION:

CONCRETE REMOVAL AND REPLACEMENT IN REGIONS OF PRIMARY REINFORCING WILL BE COMPLETED IN PHASES FOR EACH ABUTMENT SEAT AND PIER CAP. THE PURPOSE OF THE CONSTRUCTION PHASES IS TO PREVENT LOSS OF DEVELOPMENT OF PRIMARY REINFORCING DURING REPAIR PROCEDURES.

PHASING IS SHOWN FOR INDIVIDUAL ABUTMENT SEATS OR PIER CAPS. THE PHASED REPAIR OF ONE SEAT OR CAP IS NOT RELATED TO ANY OTHER SEPARATE SEAT OR CAP.

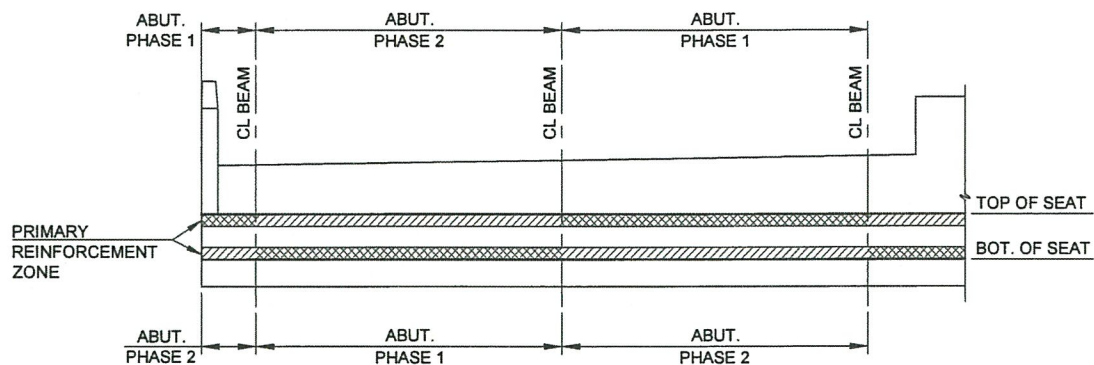
ALL PRIMARY REINFORCEMENT ZONE REPAIR AREAS IN THE SAME PHASE WILL BE COMPLETED AT THE SAME TIME INCLUDING REMOVAL OF DETERIORATED CONCRETE AND PLACEMENT OF NEW PNEUMATICALLY PLACED MORTAR OR CLASS AA CONCRETE. THE REMOVAL OF DETERIORATED CONCRETE FOR THE NEXT PHASE WILL NOT BEGIN UNTIL NEW MORTAR OR CONCRETE FROM THE PREVIOUS PHASE HAS BEEN IN PLACE FOR A MINIMUM OF 10 DAYS OR AT THE DISCRETION OF THE ENGINEER.

ALL OTHER REPAIR AREAS INCLUDING ABUTMENT WINGS, BACK WALL, CURTAIN WALL, AND FRONT FACE OF SEAT NOT IN THE PRIMARY REINFORCEMENT ZONE AS APPROVED BY THE ENGINEER, AND PIER COLUMNS AND CAP SIDE FACES NOT IN THE PRIMARY REINFORCEMENT ZONE, MAY BE REPAIRED AT ANY TIME.

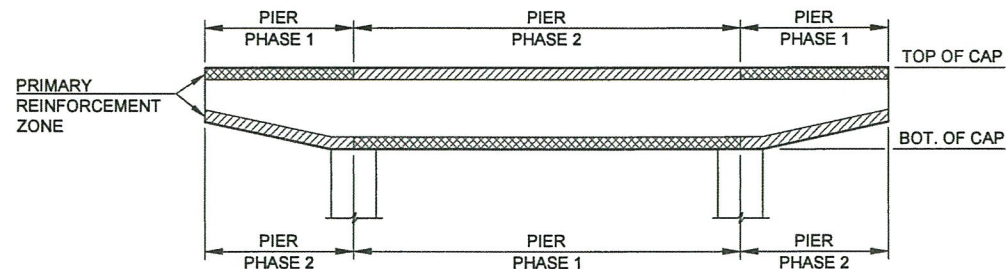
PAYMENT FOR REPAIRS:

INCLUDE ALL COSTS OF THE REPAIRS, INCLUDING PATCHING MATERIAL, SUPPLEMENTAL REINFORCING, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK, IN THE CONTRACT UNIT PRICE OF "PNEUMATICALLY PLACED MORTAR".

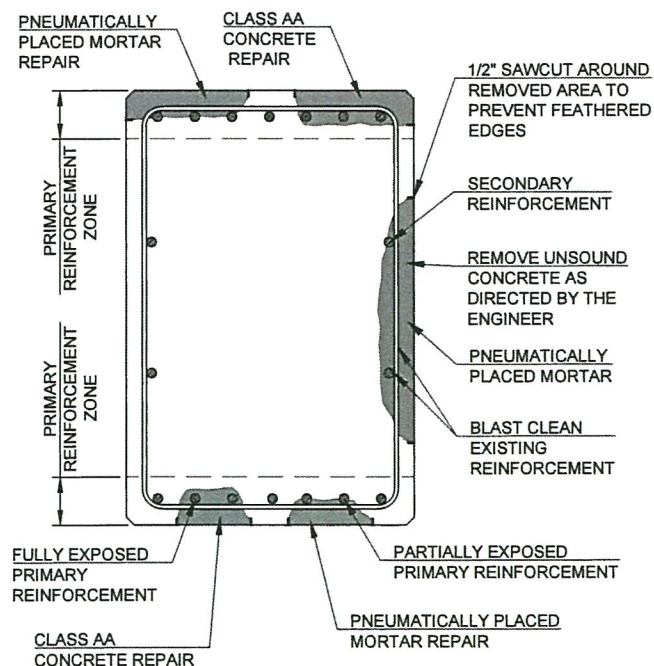
THIS PROJECT IS MANDATORILY TIED WITH TULSA COUNTY JOB PIECES: 28865(04), 28879(04) AND 28868(04). THE COSTS FOR "MOBILIZATION" AND "STAKING" FOR THIS PROJECT SHALL BE INCLUDED WITH STATE JOB PIECE 28865(04).



ABUTMENT SEAT ELEVATION
PEDESTALS OMITTED FOR CLARITY



PIER CAP ELEVATION
PEDESTALS OMITTED FOR CLARITY



SECTION THROUGH PIER CAP
ABUTMENT SEAT SIMILAR

JP 28880(04) NBI 18132
 0200 BRIDGE A 396.6' LONG FOUR SPAN STR. WITH 3 STEEL GIRDERS

ITEM NUMBER	DESCRIPTION	NOTES	UNIT	ESTIMATED QUANTITY
501(A)	1306	STRUCTURAL EXCAVATION UNCLASSIFIED	CY	22.0
501(B)	1307	SUBSTRUCTURE EXCAVATION COMMON	(1) CY	210.0
501(G)	6309	CLSM BACKFILL	(2) CY	294.0
502(C)	6116	(PL) FALSEWORK JACKING	(3) LSUM	1.0
504(A)	1304	APPROACH SLAB	(BR-1) SY	138.0
504(B)	1305	SAW-CUT GROOVING	(BR-1) SY	907.00
504(C)	6250	SEALED EXPANSION JOINT	(BR-1)(22) LF	111.0
504(E)	1381	CONCRETE PARAPET	(BR-1) LF	800.0
507(A)	6172	WEATHERING STEEL FIXED BEARING ASSEMBLY	(BR-1)(4) EA	6.0
507(B)	6176	WEATHERING STEEL EXPANSION BEARING ASSEMBLY	(BR-1)(5) EA	12.0
509	6153	SPECIAL CONCRETE FINISH	(6) LSUM	1
509	6386	SILICONE CONSTRUCTION JOINT	(7) LF	90.0
509(A)	1326	CLASS AA CONCRETE	(BR-1)(23) CY	200.0
509(B)	1328	CLASS A CONCRETE	(8) CY	49.0
510(C)	6137	SLOPE WALL (4')	(9) SY	35.0
511(B)	6010	EPOXY COATED REINFORCING STEEL	(BR-1) LB	74,093.0
512(A)	1323	PAINTING EXISTING STRUCTURES	(10) LSUM	1.0
512(B)	6303	COLLECTION AND HANDLING OF WASTE	(11) LSUM	1.0
515(A)	6013	WATER REPELLENT (VISUALLY INSPECTED)	(12) SY	1,236.0
520(A)	6058	PREPARATION OF CRACKS, ABOVE WATER	(13) LF	85.0
520(C)	6060	EPOXY RESIN, ABOVE WATER	(13) GAL	2.0
521(A)	6210	PNEUMATICALLY PLACED MORTAR	(13) SY	65.0
523(A)	6550	SEALER CRACK PREPARATION	LF	114.0
523(B)	6560	SEALER RESIN	GAL	2.0
524(A)	6610	(SP) CARBON FIBER-REINFORCED POLYMER	(14) SF	910.0
535	6130	(SP) CORROSION INHIBITOR (SURFACE APPLIED)	(15) SY	265.0
540	4510	(PL) REPAIR BRIDGE ITEM (TYPE A)	(16) LSUM	1.0
540	4525	(PL) REPAIR BRIDGE ITEM (TYPE B)	(17) EA	24
613(H)	6204	6" PERFORATED PIPE UNDERDRAIN ROUND	(BR-1)(18) LF	137.0
613(I)	6207	6" NON-PERF. PIPE UNDERDRAIN RND.	(19) LF	6.0
619(B)	2510	REMOVAL OF BRIDGE ITEM (TYPE A)	(20) LSUM	1.0
619(B)	2520	REMOVAL OF BRIDGE ITEM (TYPE B)	(21) LSUM	1.0

BR-1: PAYMENT FOR THIS ITEM WILL BE BASED ON THE PLAN QUANTITIES ONLY. SEE SECTION 109.01(b) OF THE STANDARD SPECIFICATIONS.

JP 28880(04)

ITEM NUMBER	DESCRIPTION	NOTES	UNIT	ESTIMATED QUANTITY
0600	STAKING			
642(B)	0096	CONSTRUCTION STAKING LEVEL II	(24) LSUM	1.0



NOTE: SEE SHEET 5 FOR PAY ITEM NOTES.

DESIGN	JSH	3/14	OKLAHOMA DEPARTMENT OF TRANSPORTATION	
DRAWN	MRM	3/14	BRIDGE A	TULSA COUNTY
CHECKED	JWB	3/16	SUMMARY OF PAY QUANTITIES (BRIDGE) (SHEET 1 OF 2)	
APPROVED				
SQUAD	TT			
STATE JOB NO. 28880(04)			SHEET NO. 4	