



## GENERAL NOTES

EXISTING ROAD WILL BE CLOSED TO THROUGH TRAFFIC DURING BRIDGE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BARRICADES, AND/OR OTHER WARNING DEVICES IN THE IMMEDIATE PROXIMITY OF CONSTRUCTION. COST OF BARRICADES ETC... AND MOVING/RESETTING BARRICADES AT CLOSE OF CONSTRUCTION ACTIVITIES EACH DAY, WILL BE INCIDENTAL TO THE COST OF THE PROJECT.

### RESPONSIBILITY OF COUNTY:

1. RELOCATION OF PROPERTY FENCES.
2. RIGHT-OF-WAY ACQUISITION.
3. RELOCATION OF UTILITIES.
4. POSTING THE DETOUR ROUTES AND CONSTRUCTION SIGNAGE.
5. NOTIFYING ALL LOCAL RESIDENTIAL AND COMMERCIAL PROPERTY OWNERS, SCHOOLS, AND EMERGENCY SERVICES OF ROAD CLOSURE.

THE CONTRACTOR SHALL MAINTAIN ACCESS TO PRIVATE DRIVE NEAR STATION 19+75 DURING CONSTRUCTION.

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

TREE REMOVAL WITHIN PERMANENT AND TEMPORARY RIGHT-OF-WAY SHALL BE LIMITED TO ONLY THE AREAS NECESSARY FOR CONSTRUCTION. TREES OUTSIDE THE TOE OF FILL SLOPES AND TOP OF CUT SLOPES SHALL NOT BE DISTURBED UNLESS DIRECTLY INTERFERING WITH CONSTRUCTION OR HORIZONTAL SIGHT DISTANCE. ONLY A MINIMUM AMOUNT OF TREE REMOVAL SHOULD BE DONE IN ORDER TO COMPLETE CONSTRUCTION ACTIVITIES.

ALL FLOWLINES THAT ARE TO BE FILLED SHALL BE THOROUGHLY TAMPED BEFORE CONSTRUCTION OR EXTENSION OF DRAINAGE STRUCTURES. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

IN GENERAL, ALL DISTURBED AREAS NOT RECEIVING RIP-RAP, ASPHALT PAVEMENT, CONCRETE PAVEMENT, OR OTHER SUCH TREATMENT, WILL HAVE SOLID SLAB SOD APPLIED, AS SET FORTH IN THE SPECIFICATIONS, AND WATERED UNTIL HARDY GRASS SITE STABILIZATION IS ESTABLISHED.

THE CONTRACTOR SHALL GIVE NOTICE TO THE COUNTY AND THE OKLAHOMA DEPT. OF TRANSPORTATION, DIVISION 8, IN WRITING, FOURTEEN (14) WORKING DAYS BEFORE WORK BEGINS ON THE PROJECT.

STAGING AREAS, AND ANY OTHER DISTURBED AREAS WITHIN THE CONSTRUCTION SITE MUST BE RESTORED TO PRE-CONSTRUCTION CONDITIONS UPON COMPLETION OF PROJECT. ALL COST FOR THIS WORK SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

## ENVIRONMENTAL MITIGATION NOTES

**AMERICAN BURYING BEETLE (ABB) NOTE:** THE AMERICAN BURYING BEETLE IS A LARGE CARRION BURYING BEETLE THAT IS LISTED AS ENDANGERED UNDER THE ENDANGERED SPECIES ACT. IN ORDER TO AVOID ADVERSE IMPACTS, NO ARTIFICIAL LIGHTING SHALL BE USED DURING CONSTRUCTION. CARCASSES AND ALL FOOD TRASH SHALL BE REMOVED FROM THE PERMANENT AND TEMPORARY RIGHT-OF-WAY THROUGHOUT PROJECT ACTIVITIES.

**BALD EAGLE NOTE:** IF CONSTRUCTION ACTIVITIES ARE NOT COMPLETED BY DECEMBER 1, 2016 THE RESIDENT ENGINEER SHALL CONTACT THE ODOT BIOLOGIST AT 405-521-2515. THE ODOT BIOLOGIST SHALL SCHEDULE AN ADDITIONAL SURVEY DURING DECEMBER AND JANUARY. IF THE SURVEY IS POSITIVE FOR A BALD EAGLE NEST, NO WORK WILL BE ALLOWED WITHIN 660 FEET OF THE NEST DURING THE NESTING SEASON (DECEMBER 1 THROUGH MAY 31), IN ACCORDANCE WITH THE NATIONAL BALD EAGLE MANAGEMENT GUIDELINES. IF THE 660 FOOT BUFFER CANNOT BE MAINTAINED, ALL CLEARING, CONSTRUCTION AND LANDSCAPING ACTIVITIES WITHIN 660 FEET OF THE NEST SHALL BE CONDUCTED BETWEEN JUNE 1 AND NOVEMBER 30, OUTSIDE THE NESTING SEASON.

**GRAY BAT NOTE:** THE PROJECT OCCURS WITHIN THE FORAGING RADIUS OF KNOWN MATERNITY COLONIES FOR THE GRAY BAT. IN ORDER TO AVOID ADVERSE IMPACT TO THE SPECIES, ALL PROJECT ACTIVITIES - INCLUDING TREE REMOVAL AND BRIDGE DEMOLITION - SHALL BE COMPLETED BY MARCH 31, 2017, PRIOR TO BATS EMERGING FROM HIBERNATION.

**BAT SPECIES NOTE:** THE ODOT BIOLOGIST INSPECTED BRIDGE (NBI: 20247) ON 5/11/2016 AND FOUND NO EVIDENCE THAT THE BRIDGE WAS BEING USED BY BATS. THIS INSPECTION IS GOOD FOR THE 2016 ACTIVE SEASON ONLY. IF BRIDGE DEMOLITION IS NOT COMPLETED BY MARCH 31, 2017, THE RESIDENT ENGINEER SHALL CONTACT THE ODOT BIOLOGIST AT 405-521-2515, TO SCHEDULE ANOTHER BAT USE INSPECTION. IF BATS ARE FOUND TO BE USING THE STRUCTURE, DEMOLITION ACTIVITIES SHALL CEASE UNTIL AN ACOUSTIC SURVEY CAN BE COMPLETED BETWEEN MAY 15 AND AUGUST 15. IF THE ACOUSTIC SURVEY INDICATES THE PRESENCE OF LISTED BAT SPECIES, DEMOLITION SHALL BE RESTRICTED TO INACTIVE SEASON BETWEEN NOVEMBER 16 AND MARCH 31. THE CONTRACTOR WILL NOT BE COMPENSATED FOR ANY DELAYS.

**BAT TREE REMOVAL NOTE:** THE INDIANA BAT AND NORTHERN LONG-EARED BAT ARE INSECTIVOROUS MIGRATORY BAT SPECIES PROTECTED BY THE ENDANGERED SPECIES ACT. SUITABLE SUMMER ROOSTING HABITAT OCCURS WITHIN THE PROJECT'S ACTION AREA. IN ORDER TO AVOID ADVERSE IMPACTS TO BATS THE FOLLOWING MEASURES SHALL BE TAKEN:

1. REMOVAL OF ALL LIVE OR DEAD TREES, GREATER THAN 3 INCHES DIAMETER AT BREAST HEIGHT (DBH), NECESSARY FOR CONSTRUCTION OR UTILITIES SHALL BE CONDUCTED BETWEEN NOVEMBER 16 AND MARCH 31.
2. IF REMOVAL OF TREES CANNOT BE DONE BETWEEN NOVEMBER 16 AND MARCH 31, THE PROJECT MANAGER OR THE UTILITIES COORDINATOR OR THE RESIDENT ENGINEER NEEDS TO CONTACT THE ODOT BIOLOGIST AT (405) 521-2515 TO SCHEDULE A SPECIES SURVEY PRIOR TO START OF WORK. THE SURVEY CAN ONLY TAKE PLACE BETWEEN MAY 15 AND AUGUST 15. THE SURVEY AND ASSOCIATED USFWS CONSULTATION COULD TAKE 60 DAYS OR MORE TO COMPLETE. IF BATS ARE FOUND TO BE USING THE TREES FOR ROOSTING, THE TREES CANNOT BE REMOVED UNTIL NOVEMBER 16. THE CONTRACTOR WILL NOT BE COMPENSATED FOR ANY DELAYS.

**KARST NOTE:** IF CAVES, SINKHOLES, LOSING STREAMS OR SPRINGS ARE ENCOUNTERED WITHIN THE PROJECT LIMITS AT ANY POINT BEFORE OR DURING THE PROJECT, A NO-WORK ZONE EXTENDING 300 FEET IN ALL DIRECTIONS SHALL BE ESTABLISHED AROUND THE NEWLY DISCOVERED FEATURE, AND THE RESIDENT ENGINEER SHALL IMMEDIATELY CONTACT THE ODOT ENVIRONMENTAL PROGRAMS DIVISION AT (405) 521-2515. ALL PARKING, MAINTENANCE, STAGING, FUELING, STORMWATER MANAGEMENT ACTIVITIES, GROUND DISTURBING, TREE-CLEARING, OR ANY OTHER CONSTRUCTION ACTIVITY SHALL NOT BE ALLOWED WITHIN THE 300' BUFFER. BEST MANAGEMENT PRACTICES, SECONDARY CONTAINMENT MEASURES, AND OTHER STANDARD SPILL PREVENTION AND COUNTERMEASURES WILL BE ENACTED, IN CONJUNCTION WITH USFWS CONSULTATION, TO AVOID IMPACTS TO KARST FEATURES AND POTENTIAL HIBERNACULUM.

**RIPARIAN VEGETATION REMOVAL RESTRICTION NOTE:** THE REMOVAL OF TREES AND SHRUBS SHALL BE RESTRICTED TO AREAS WITHIN THE ACTUAL LIMITS OF CONSTRUCTION (TOE OF SLOPE/TOP OF CUT).

## ENV. MITIGATION NOTES (CONTINUED)

**MIGRATORY BIRD NOTE:** MIGRATORY BIRDS ARE PROTECTED BY THE FEDERAL MIGRATORY BIRD TREATY ACT. THESE BIRDS COMMONLY USE BRIDGES AND CULVERTS FOR NESTING. THE NESTING SEASON FOR THE BIRDS RUNS FROM APRIL 1 TO AUGUST 31. ANY ACTIVITIES WHICH WOULD DESTROY ACTIVE NESTS OR HARM EGGS OR BIRDS WOULD VIOLATE THE MIGRATORY BIRD TREATY ACT. MIGRATORY BIRD USE OF BRIDGE NBI NO. 20247 HAS BEEN OBSERVED DURING THE INITIAL SURVEY CONDUCTED AS PART OF THE BIOLOGICAL STUDIES IN 2016. THE RESIDENT ENGINEER WILL EVALUATE THE CONTRACTOR'S PROPOSED WORK METHODS AND CONCLUDE WHETHER THE PROPOSED WORK WOULD POSE DISRUPTION TO ANY NESTING BIRDS BEFORE WORK NEAR THE STRUCTURE IS AUTHORIZED. IF THE PROPOSED WORK WILL HARM ANY NESTING BIRDS, THE BRIDGE MAY BE NETTED PRIOR TO APRIL 1 OR THE WORK DELAYED UNTIL THE NESTING SEASON IS COMPLETE. METHODS OTHER THAN NETTING MUST BE PRE-APPROVED BY THE ODOT BIOLOGIST.

**ALL CONSTRUCTION ACTIVITIES THAT REQUIRE TREE REMOVAL, BRIDGE DEMOLITION, AND IN-STREAM CONSTRUCTION WILL BE COMPLETED BETWEEN NOVEMBER 16 AND MARCH 31.**

## BRIDGE NOTES

### SPECIFICATIONS

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

### RIPRAP

A 2 FOOT THICK LAYER OF TYPE I-A PLAIN RIPRAP AND A 6" THICK TYPE I-A FILTER BLANKET SHALL BE PLACED ON THE BRIDGE HEADERS AT THE ABUTMENTS AS SHOWN IN THE PLANS. THE FILTER BLANKET SHALL BE PLACED IN ONE LAYER.

### ABUTMENT PILING CAPACITY

THE FACTORED REACTION FOR EACH HP 12x53 PILE AT THE ABUTMENTS IS 70 TONS. THE FOLLOWING FORMULA (GATES EQUATION) SHALL BE USED TO DETERMINE THE AXIAL LOAD RESISTANCE OF THE DRIVEN FOUNDATION PILES:

$$AXIAL \text{ LOAD RESISTANCE} = \phi [(0.875 E^{0.5} \log_{10}(10N)) - 50] \text{ (TONS)}$$

WHERE:

- $\phi$  = RESISTANCE FACTOR OF 0.4
  - $E$  = ENERGY PRODUCED BY THE HAMMER PER BLOW IN FOOT-POUNDS. FOR GRAVITY AND SINGLE ACTING DIESEL HAMMERS, THE VALUE IS BASED ON THE ACTUAL RAM STROKE OBSERVED IN THE FIELD AND MEASURED IN FEET MULTIPLIED BY THE RAM WEIGHT IN POUNDS.
  - $N$  = AVERAGE NUMBER OF HAMMER BLOWS PER INCH OF PILE PENETRATION FOR THE LAST 10 TO 20 BLOWS DELIVERED TO THE PILE HEAD.
- THE ABOVE FORMULA IS ONLY APPLICABLE WHEN:
- THE PILE DRIVING HAMMER HAS A FREE FALL (GRAVITY & SINGLE ACTING HAMMER ONLY).
  - THE HEAD OF THE PILE IS NOT MUSHROOMED, CRUSHED OR OTHERWISE DAMAGED.
  - THE PENETRATION IS QUICK AND UNIFORM.
  - THERE IS NO APPRECIABLE REBOUND OF THE HAMMER, AND A FOLLOWER IS NOT USED.

THE NUMBER OF BLOWS PER INCH OF PILE PENETRATION MAY BE MEASURED EITHER DURING INITIAL DRIVING OR BY RE-DRIVING WITH A WARM HAMMER OPERATED AT FULL ENERGY AFTER A PILE SET PERIOD, AS DETERMINED BY THE ENGINEER. IF WATER JETS ARE USED IN CONNECTION WITH THE DRIVING, DETERMINE THE AXIAL LOAD RESISTANCE BY THE FORMULA SHOWN ONLY AFTER THE JETS HAVE BEEN WITHDRAWN.

### PERFORATED PIPE UNDERDRAIN AT ABUTMENTS

ALL COSTS TO INSTALL THE PERFORATED PIPE UNDERDRAIN AS SPECIFIED OR AS SHOWN IN THE PLANS AND ON STANDARD PUD-3, INCLUDING THE COST OF ALL PERFORATED PIPE, PIPE UNDERDRAIN COVER MATERIAL, MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT OF "6 INCH PERFORATED PIPE UNDERDRAIN ROUND."

### NON-PERFORATED PIPE UNDERDRAIN AT ABUTMENTS

ALL COSTS TO INSTALL THE NON-PERFORATED PIPE UNDERDRAIN AS SPECIFIED OR AS SHOWN IN THE PLANS AND ON STANDARD PUD-3, AND AS DIRECTED BY THE ENGINEER, INCLUDING THE COST OF ALL NON-PERFORATED PIPE, TRENCH EXCAVATION, STANDARD BEDDING MATERIAL, BACKFILLING, RODENT SCREENS, MATERIAL, LABOR, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT OF "6" NON-PERF. PIPE UNDERDRAIN RND."

### CONCRETE INTERMEDIATE DIAPHRAGMS

ONCE THE CONCRETE HAS BEEN PLACED FOR THE CONCRETE INTERMEDIATE DIAPHRAGMS, WAIT A MINIMUM OF 24 HOURS BEFORE REMOVING THE SIDE FORMS. DO NOT REMOVE THE BOTTOM FORM FOR A MINIMUM OF 3 DAYS OR AT THE DISCRETION OF THE ENGINEER. THIS TIME MAY BE SHORTENED IF THE CONCRETE HAS ATTAINED 80% OF THE SPECIFIED COMPRESSIVE STRENGTH. DO NOT PLACE THE CONCRETE FOR THE DECK SLAB OR APPLY OTHER MASSIVE LOADS TO THE BEAMS OR DIAPHRAGMS UNTIL THE CONCRETE IN THE DIAPHRAGMS HAS BEEN IN PLACE FOR A MINIMUM OF 10 DAYS OR IN ACCORDANCE WITH THE DISCRETION OF THE ENGINEER. THIS TIME MAY BE SHORTENED IF THE CONCRETE HAS ATTAINED 80% OF THE SPECIFIED COMPRESSIVE STRENGTH.

## BRIDGE PAY QUANTITY NOTES

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

(1) ITEM "REMOVAL OF EXISTING BRIDGE STRUCTURE" CONSISTS OF REMOVAL AND DISPOSAL OF 92' x 28' DOUBLE T BEAM BRIDGE WITH CONCRETE DECK, CONCRETE ABUTMENTS AND TWO CONCRETE PIERS, IN ACCORDANCE WITH SECTION 619.04.B OF THE SPECIFICATIONS AND IN A MANNER APPROVED BY THE ENGINEER. CENTER OF SAID BRIDGE = STATION 15+24, 3' RT.

IN ADDITION, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF TWO CONCRETE ABUTMENTS LYING 25' TO 35' SOUTH OF THE EXISTING BRIDGE, ALONG WITH SOME LARGE CHUNKS OF CONCRETE LYING IN THE CHANNEL BETWEEN SAID ABUTMENTS AND NEAR VICINITY.

- (2) PRICE BID TO INCLUDE FITTING PILES WITH ROCK TIPS OR STEEL PLATE REINFORCING TIPS AS DETAILED IN STANDARD HP1-2.
- (3) PILE LENGTHS VARY, SEE ELEVATION ON SHEET 6 FOR DESIGN LENGTHS.
- (4) THE CONTRACTOR SHALL SUBSTITUTE "CLSM BACKFILL" OR CELLULAR CONCRETE IN PLACE OF "GRANULAR BACKFILL" AT ALL OCCURRENCES FOUND IN THE COUNTY BRIDGE STANDARDS: CB26-C-SKO-ABUT-PC3-01E & CB26.32-C-SKO-WNG-PC3-01E.
- (5) PRICE BID TO INCLUDE COVER MATERIAL, FILTER FABRIC, TRENCH EXCAVATION, STANDARD BEDDING MATERIAL, PIPE CAPS, RODENT SCREENS, BACKFILLING OF TRENCH EXCAVATION, MATERIAL, LABOR, EQUIPMENT AND ALL INCIDENTALS ASSOCIATED WITH FURNISHING AND INSTALLING PERFORATED AND NON-PERFORATED UNDERDRAIN PIPES.

## ROADWAY PAY QUANTITY NOTES

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

(R-25) ESTIMATED AT 140 LBS. PER CU. FT.

(R-28) PRIME COAT SHALL BE APPLIED AT AN ESTIMATED RATE OF 0.35 GAL. PER SQ. YD. WHEN APPLIED TO SUBGRADE, AND 0.25 GAL. PER SQ. YD. WHEN APPLIED TO AGGREGATE BASE. THE ACTUAL CUTBACK PRIME COAT REQUIRED FOR PLACEMENT OPERATIONS WILL BE DETERMINED BY THE CONTRACTOR, AND SHALL CONSIDER THE RESIDUE FROM DISTILLATION PERCENTAGE SHOWN IN SECTION 708.03 OF THE STANDARD SPECIFICATIONS.

(R-32) ESTIMATED AT 112 LBS. PER SQ. YD. PER 1" THICK.

(TS-24) QUANTITY SHOWN INCLUDES 2,250 L.F. TRAFFIC STRIPE (MULTI-POLYMER) (WHITE) AND 2,250 L.F. TRAFFIC STRIPE (MULTI-POLYMER) (YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF FOUR INCH (4") WIDE TRAFFIC STRIPE.

(6) ESTIMATED QUANTITY, TO BE USED FOR TEMPORARY EROSION AND SEDIMENT CONTROL. DEVICES TO BE USED IN A MANNER AND LOCATION APPROVED BY THE ENGINEER. PRICE BID TO INCLUDE PERIODIC REMOVAL OF SILT AND OTHER DEBRIS, WHICH MUST BE PERFORMED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PHASE. SEE STD. TSC1-3-1, TSC2-3-1 & TSD-2-0.

(7) ITEM "REMOVAL OF STRUCTURES & OBSTRUCTIONS" CONSISTS OF REMOVAL AND DISPOSAL OF ONE 31 FOOT 36" CGSP AT STA 12+50±, AND REMOVAL FOR SALVAGE OF 302 LF OF W-BEAM GUARDRAIL WITH STEEL POSTS. GUARDRAIL WITH STEEL POSTS SHALL BE REMOVED AND STACKED INSIDE OF THE RIGHT-OF-WAY AND CONTRACTOR SHALL NOTIFY COUNTY THAT SAID ITEMS ARE READY FOR PICKUP.

(8) NOT SHOWN IN THE PLANS BUT TO BE USED AT THE DISCRETION OF THE ENGINEER.

(9) NOTE, RECYCLED COMPOSITE (PLASTIC) BLOCKOUTS MAY BE SUBSTITUTED IN PLACE OF WOODEN BLOCKOUTS, IF APPROVED BY THE ENGINEER.

(10) SOLID SLAB SOD SHALL BE UTILIZED ON ALL EXPOSED SOIL THAT WILL NOT BE TREATED WITH ASPHALT, T.B.S.C., CONCRETE OR RIP-RAP. IT IS INTENDED THAT MOST OF THE APPLIED SOD WILL BECOME PERMANENT VEGETATION. THAT QUANTITY IS SHOWN ON SHEET 12 (EROSION CONTROL PLAN) DUE TO CONSTRUCTION ACTIVITIES, SOME ADDITIONAL AREAS MAY BE IMPACTED OR NEED TO BE REPLACED. THIS ITEM INCLUDES AN ADDITIONAL 5,800 SQ. YDS. TO BE USED FOR TEMPORARY EROSION AND SEDIMENT CONTROL IN A MANNER APPROVED BY THE ENGINEER. SEE STD. SSS-1-1.

(11) PRICE BID TO INCLUDE COST OF WATERING AND FERTILIZER. WATERING ESTIMATED AT 60 GALLONS PER SQ. YARD FOR ESTIMATING PURPOSES ONLY. CONTRACTOR WILL PROVIDE SUFFICIENT WATER TO PRODUCE ADEQUATE GRASS GROWTH AS APPROVED BY THE ENGINEER. (10-20-10) FERTILIZER, OR APPROVED EQUIVALENT, SHALL BE ESTIMATED AT 200 LBS. PER 1,000 SQ. YARDS.

(12) ESTIMATED AT APPROX. 1 ACRE.

(13) THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT, AND PLACE IT BACK ON THE SECTION IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATIONS. RESERVED TOPSOIL SHALL BE SPREAD FIRST ON THE COMPLETED SLOPES OF THE CUT SECTIONS AND THE REMAINDER ON THE COMPLETED FILL SLOPES OR OTHER PRIORITY AREAS DESIGNATED BY THE ENGINEER. ALL ADDITIONAL COSTS ASSOCIATED WITH OPERATION SHALL BE INCLUDED IN THE PAY ITEM FOR SALVAGED TOPSOIL, LUMP SUM. PRICE BID TO INCLUDE COST OF 18-46-0 FERTILIZER, OR APPROVED EQUIVALENT, ESTIMATED AT 150 LBS PER ACRE ON WHICH TOPSOIL IS PLACED.

(14) PRICE BID TO INCLUDE COST OF REMOVING APPROXIMATELY 1,644 SQ. YARDS OF EXISTING PAVED ROAD FROM STATION 8+50 TO STATION 14+78 AND APPROXIMATELY 939 SQ. YARDS OF EXISTING PAVED ROAD FROM STATION 15+69 TO STATION 19+75, ESTIMATED THICKNESS OF EXISTING ROAD ASPHALT = 5 INCHES.

(15) PRICE BID TO INCLUDE COST OF OBLITERATING PORTIONS OF THE EXISTING PAVED ROAD AS SHOWN ON THE PLAN AND PROFILE SHEETS AND THE CROSS SECTION SHEETS. WORK INCLUDES FLATTENING, SMOOTHING, GRADING TO DRAIN AND COVERING WITH TOPSOIL REMOVED FROM NEW ROAD ALIGNMENT. WORK SHALL BE PERFORMED IN A MANNER APPROVED BY THE ENGINEER.

(16) ESTIMATED AT 0.075 GAL PER SQ. YD. PRIOR TO DILUTION. PRICE BID TO INCLUDE WATER NECESSARY FOR DILUTION. TACK COAT SHALL BE APPLIED AND PAID FOR IN ACCORDANCE WITH SECTION 407, "FOG SEAL AND TACK COAT".

(17) (GET) SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SKT-SP-MSG.

REVISIONS		
DESCRIPTION	DATE	
Added Vegetative Mulching	6/24/2016	
Added Environmental Mitigation Notes	7/5/2016	

0100 ROADWAY PAY QUANTITIES				
NUMBER	DESCRIPTION	NOTE#	UNIT	QUANTITY
201(A)	0102 CLEARING AND GRUBBING	(12)	LSUM	1
202(A)	0183 UNCLASSIFIED EXCAVATION	(R-1)(15)	C.Y.	3,515
205(A)	4229 TYPE A-SALVAGED TOPSOIL	(13)	LSUM	1
221(C)	2801 TEMPORARY SILT FENCE	(6)	L.F.	972
221(F)	0100 TEMPORARY SILT DIKE	(6)	L.F.	220
230(A)	2806 SOLID SLAB SODDING	(10)(11)	S.Y.	8,923
233(A)	2817 VEGETATIVE MULCHING		AC.	1
303(B)	2110 AGGREGATE BASE TYPE B		C.Y.	510
402(E)	0225 TRAFFIC BOUND SURFACE COURSE TYPE E	(R-25)	TON	153.8
407(B)	0250 TACK COAT	(16)	GAL.	229
408	5774 PRIME COAT	(R-28)	GAL.	765
411(B)	5945 SUPERPAVE, TYPE S3 (PG 64-22 OK)	(R-32)	TON	500.6
411(C)	5960 SUPERPAVE, TYPE S4 (PG 64-22 OK)	(R-32)	TON	333.8
509(D)	0325 CLASS C CONCRETE	(8)	C.Y.	10
619(A)	0920 REMOVAL OF STRUCTURES & OBSTRUCTIONS	(7)	LSUM	1
619(B)	4728 REMOVAL OF ASPHALT PAVEMENT	(14)	S.Y.	2,583
623(A)	0932 BEAM GUARDRAIL W-BEAM SINGLE	(9)	L.F.	350
623(F)	5686 GUARDRAIL ANCHOR UNIT (TYPE D-BF)	(9)	EA.	4
623(G)	8571 GUARDRAIL END TREATMENT (GET)	(17)	EA.	4
850(A)	8110 SHEET ALUMINUM SIGNS		S.F.	20.5
851(C)	8327 2 1/4" SQUARE TUBE POST		L.F.	24
856(A)	8530 TRAFFIC STRIPE (MULTI-POLYMER) (4" WIDE)	(TS-24)	L.F.	4,580

0200 BRIDGE PAY QUANTITIES				
NUMBER	DESCRIPTION	NOTE#	UNIT	QUANTITY
501(B)	1307 SUBSTRUCTURE EXCAVATION COMMON	(B-1)	C.Y.	180
501(G)	6315 CLSM BACKFILL	(B-1)(4)	C.Y.	76
503(A)	1312 PRESTRESSED CONCRETE BEAMS (TYPE III)	(B-1)	L.F.	448.00
504(B)	1305 SAW-CUT GROOVING	(B-1)	S.Y.	369.6
504(C)	6250 SEALED EXPANSION JOINT	(B-1)	L.F.	29.17
504(D)	6239 CONCRETE RAIL (TR3)	(B-1)	L.F.	361.2
506(A)	1322 STRUCTURAL STEEL	(B-1)	LB	800
507(A)	6172 WEATHERING STEEL FIXED BEARING ASSEMBLY	(B-1)	EA.	6
507(B)	6176 WEATHERING STEEL EXPANSION BEARING ASSEMBLY	(B-1)	EA.	6
509(A)	1326 CLASS AA CONCRETE	(B-1)	C.Y.	116.8
509(B)	1328 CLASS A CONCRETE	(B-1)	C.Y.	84
511(A)	1332 REINFORCING STEEL	(B-1)	LB	38,420
511(B)	6010 EPOXY COATED REINFORCING STEEL	(B-1)	LB	2,783
514(A)	6010 PILES, FURNISHED (HP 10X42)	(2)(3)	L.F.	84
514(B)	6292 PILES, DRIVEN (HP 10X42)	(3)	L.F.	84
514(A)	6011 PILES, FURNISHED (HP 12X53)	(2)(3)	L.F.	175
514(B)	6294 PILES, DRIVEN (HP 12X53)	(3)	L.F.	175
514(L)	6220 PILE SPLICE, H-PILE (NON-BIDDABLE)		EA.	1
516(A)	6093 DRILLED SHAFTS 42" DIAMETER		L.F.	46
516(C)	6200 CROSSHOLE SONIC LOGGING		EA.	1
601(B)	1353 TYPE I-A PLAIN RIPRAP		TON	1,903.2
601(C)	1355 TYPE I-A FILTER BLANKET		TON	475.8
613(H)	6204 6" PERFORATED PIPE UNDERDRAIN ROUND	(B-1)(5)	L.F.	52
613(I)	6207 6" NON-PERF. PIPE UNDERDRAIN RND.	(5)	L.F.	52
619(D)	1397 REMOVAL OF EXISTING BRIDGE STRUCTURE	(1)	LSUM	1

0600 STAKING PAY QUANTITY				
NUMBER	DESCRIPTION	NOTE#	UNIT	QUANTITY
642(B)	0096 CONSTRUCTION STAKING LEVEL II		LSUM	1

0640 CONSTRUCTION PAY QUANTITIES				
NUMBER	DESCRIPTION	NOTE#	UNIT	QUANTITY
220	2800 SWPPP DOCUMENTATION AND MANAGEMENT		LSUM	1
641	1399 MOBILIZATION		LSUM	1

Design	GLB	4/16	DELAWARE COUNTY WHITE WATER CREEK BRIDGE	
Drawn	JDF	4/16	<b>SUMMARY OF PAY QUANTITIES AND GENERAL NOTES</b> County: <u>DELAWARE</u> Project No. <u>J/P 32598(04)</u> Sheet No. <u>3</u>	
Checked	TSM	6/16		
Approved				
Squad				