

A d d e n d u m

Iowa Department of Transportation

Date of Letting: June 21, 2016

Office of Contracts

Date of Addendum: June 15, 2016

B.O.	Proposal ID	Proposal Work Type	County	Project Number	Addendum
006	77-C077-203	BRIDGE REPLACEMENT - PPCB	POLK	BRM-C077(203)--8N-77	21JUN006.A01

Make the following change to the ESTIMATING PROPOSAL, Page 1:

From: Predetermined Wages Are Not In Effect

To: Predetermined Wages Are In Effect

Make the following changes to the PROPOSAL SCHEDULE OF PRICES:

Change Proposal Line No. 0160 2402-2720000 EXCAVATION CLASS 20:

From: 75.000 CY

To: 139.000 CY

Change Proposal Line No. 0170 2403-0100010 STRUCTURAL CONCRETE (BRIDGE):

From: 288.800 CY

To: 312.600 CY

Change Proposal Line No. 0180 2404-7775000 REINFORCING STEEL:

From: 3,734.000 LB

To: 5,713.000 LB

Change Proposal Line No. 0190 2404-7775005 REINFORCING STEEL, EPOXY COATED:

From: 60,238.000 LB

To: 61,475.000 LB

Add Proposal Line No. 0401 2402-2721000 EXCAVATION CLASS 21; 207.000 CY

If the above changes are not made, they will be made as shown here.

Replace plan sheet C.01, C.02, & D.01 with attached.

Plan Sheet C.01 is submitted. The following changes were made:

- The reference note for Item 16, Class 20 Excavation, was revised to read “QUANTITY FOR ABUTMENTS AND PIER EXCAVATION. SUITABLE MATERIAL CAN BE USED FOR CLASS 10, ROADWAY MATERIAL IN FORESLOPES AND BERMS AS APPROVED BY ENGINEER.
- The quantity for Item 16, EXCAVATION, CLASS 20 was changed to 139.00 CY.
- Item 17, EXCAVATION, CLASS 21, was added with a quantity of 207 CY.

- A note for Item 17, EXCAVATION, CLASS 21, was added “INCLUDES NECESSARY EXCAVATION FOR PIERS BELOW EXCAVATION CLASSIFICATION LINE, ELEV. 885.00.”
- The quantity for Item 18, STRUCTURAL CONCRETE (BRIDGE) was changed to 312.000 CY.
- The quantity for Item 19, REINFORCING STEEL was changed to 5,713.000 LB.
- The quantity for Item 20, REINFORCING STEEL, EPOXY COATED was changed to 61,475.000 LB.
- The remaining items and notes were renumbered to reflect the added item.

Plan Sheet C.02 is submitted. The following change was made:

- The “BRIDGE APPROACH SECTION” tabulation was added to the sheet.

Plan Sheet D.01 is submitted. The following change was made:

- The excavation classification line for Class 20/Class 21 with an elevation of 865.00 was added to the profile section of this sheet.

Plotted By

File Name and Date

ESTIMATE REFERENCE INFORMATION		PC100-4 07-24-97	
Data listed below is for informational purposes only and shall not constitute a basis for any extra work orders.			
ITEM NO.	DESCRIPTION		
1. Clearing and Grubbing			
A. LIMITS OF CLEARING AND GRUBBING SHALL BE STA. 12+00 TO STA. 19+00.			
B. NO BURNING WILL BE ALLOWED ON THIS PROJECT			
C. TREES INCLUDED IN CLEARING AND GRUBBING MAY BE INHABITED BY THE INDIANA BAT (MYOTIS SODALIST), A STATE AND FEDERAL LISTED ENDANGERED SPECIES. REMOVING A TREE, BETWEEN APRIL 1st AND SEPTEMBER 30th, BEING USED BY AN INDIANA BAT CONSTITUTES "TAKING" OF A PROTECTED SPECIES, WHICH IS PUNISHABLE BY LAW. CONTRACTING AUTHORITY SHALL CUT DOWN TREES INCLUDED IN CLEARING AND GRUBBING PRIOR TO APRIL 1st, 2016. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING OF FELLED TREES.			
2. Special Backfill.			
A. MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 2102 OF THE IOWA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.			
B. SALVAGED HMA OR UNCLASSIFIED ASPHALT MILLINGS MAY BE USED AS ROADWAY SUBBASE. IF THE CONTRACTOR ELECTS TO UTILIZE ASPHALT CEMENT CONCRETE MILLINGS, THE MATERIAL SHALL BE CRUSHED OR PULVERIZED SO 100% WILL PASS THE 1 1/2 INCH SIEVE SCREEN WITH NO OTHER GRADATION REQUIREMENTS.			
3. Excavation, Class 10 Roadway			
A. LIMITS OF GRADING ON THIS PROJECT ARE FROM STA. 11+75 TO STA. 19+25.			
B. TYPE A COMPACTION WILL BE REQUIRED. QUANTITY INCLUDES 35% SHRINKAGE FACTOR.			
C. NO OVERHAUL WILL BE ALLOWED.			
D. THERE ARE APPROXIMATELY 1,841 C.Y. AVAILABLE IN ON-SITE CUT AND FROM CLASS 13 EXCAVATION THE REMAINING 5,102 C.Y. OF SUITABLE MATERIAL SHALL BE FURNISHED BY THE CONTRACTOR, FROM A SOURCE APPROVED BY THE ENGINEER. APPROVAL OF BORROW MUST BE OBTAINED PRIOR TO ANY EXCAVATION, INCLUDING, IF NECESSARY, A POLK COUNTY SURVEY			
4. Excavation, Class 13 Roadway			
A. EXCAVATION CLASS 13 QUANTITY (1,431 C.Y.) WILL BE FOR REMOVAL OF OLD ROADBED			
5. Class 10 Channel Excavation			
A. MATERIAL FROM CLASS 10 CHANNEL EXCAVATION TO BE DISPOSED OF ON SITE AS DIRECTED BY THE ENGINEER. SUITABLE MATERIAL MAY BE USED FOR CLASS 10 ROADWAY MATERIAL IN FORESLOPES AND BERMS AS APPROVED BY ENGINEER.			
6. Topsoil, Furnish and Spread			
A. SHALL BE IN ACCORDANCE WITH SECTION 2105 OF THE STANDARD SPECIFICATIONS.			
7. Granular Shoulders, Type B			
A. CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTION 2121 OF THE STANDARD SPECIFICATIONS. EXCEPT GRANULAR SHOULDER MATERIAL SHALL BE FULL DEPTH WITH NO EARTH SHOULDER CONSTRUCTION REQUIRED.			
B. THE EQUIPMENT USED TO SPREAD AND EQUALIZE THE GRANULAR SHOULDER MATERIAL SHALL CONFORM TO STANDARD SPECIFICATION 2001.13D. SPREADERS MOUNTED ON THE FRONT OF A MOTOR GRADER WILL NOT BE ALLOWED.			
C. MORE THAN ONE PASSAGE OF THE SPREADING AND FINISHING EQUIPMANT MAY BE REQUIRED TO OBTAIN THE DESIRED CROSS SLOPE AND CROSS SECTION.			
D. MATERIAL SHALL BE SAME AS CLASS A , CRUSHED STONE, GRADATION NO. 11 OR AT THE CONTRACTORS OPTION, ASPHALT MILLINGS MAY BE UTILIZED. IF THE CONTRACTOR ELECTS TO UTILIZE ASPHALT MILLINGS, THE MATERIAL SHALL BE CRUSHED OR PULVERIZED SO 100% SHALL PASS THE 1 1/2 INCH SIEVE SCREEN WITH NO OTHER GRADATION REQUIREMENTS.			
8. Bridge Approach, Secondary Roads			
A. SEE STANDARD ROAD PLAN BR-106.			
B. PRICE BID TO INCLUDE COST OF ALL MATERIAL, LABOR AND EQUIPMENT TO CONSTRUCT APPROACH SECTIONS.			
9-10 Hma, 3,000,000esal, Intermediate and Surface, 1/2 inch mix			
A. ONE HALF (1/2) WIDTH PAVER SHALL BE USED FOR INTERMEDIATE COURSE AND FULL WIDTH PAVER OR TWO HALF (1/2) WIDTH PAVERS SHALL BE USED FOR SURFACE COURSE.			
B. ESTIMATED AT 145 POUNDS PER CUBIC FOOT.			
C. TACK COAT TO BE APPLIED AT A RATE OF 0.10 GALLONS PER SQUARE YARD WITH CSS-1 DILUTED 1:1. COST OF TACK COAT TO BE CONSIDERED INCIDENTAL.			
D. CERTIFIED PLANT INSPECTION WILL BE REQUIRED ON THIS PROJECT, AS PER SECTION 2521 OF THE STANDARD SPECIFICATIONS.			
9. Hma, 3,000,000 esal, Intermediate, 1/2 inch mix			
A. COMPACTION OF THE SURFACE COURSE SHALL BE IN ACCORDANCE WITH SECTION 2303.03,C,5, CLASS I COMPACTION, OF THE STANDARD SPECIFICATIONS.			
10. Hma, 3,000,000 esal, Surface, 1/2 inch mix			
A. COMPACTION OF THE SURFACE COURSE SHALL BE IN ACCORDANCE WITH SECTION 2303.03,C,5, CLASS I COMPACTION, OF THE STANDARD SPECIFICATIONS.			
11. Asphalt Binder,PG-64-22			
A. ASPHALT BINDER ESTIMATED AT 5.50%.			
12. Hma Pavement Samples			
A. CONTRACTOR SHALL CUT SAMPLES IN ACCORDANCE WITH SECTION 2303.21 OF THE STANDARD SPECIFICATIONS.			
15. Removal of Existing Bridge			
A. REFER TO TABULATION "REMOVAL OF EXISTING BRIDGE" FOR LOCATION AND DETAILS.			
B. ALL MATERIALS REMOVED SHALL BECOME PROPERTY OF THE CONTRACTOR.			

ESTIMATE REFERENCE INFORMATION		PC100-4 07-24-97	
Data listed below is for informational purposes only and shall not constitute a basis for any extra work orders.			
ITEM NO.	DESCRIPTION		
16. Class 20 Excavation			
A. QUANTITY FOR ABUTMENTS AND PIER EXCAVATION. SUITABLE MATERIAL CAN BE USED FOR CLASS 10, ROADWAY MATERIAL IN FORESLOPES AND BERMS AS APPROVED BY ENGINEER.			
17. Class 21 Excavation			
A. INCLUDES NECESSARY EXCAVATION FOR PIERS BELOW EXCAVATION CLASSIFICATION LINE, ELEV. 885.00			
18. Structural Concrete (Bridge)			
A. THE COST OF FURNISHING AND PLACING ABUTMENT SUBDRAINS (INCLUDING EXCAVATION), GRANULAR BACKFILL, POROUS BACKFILL, AND SUBDRAIN OUTLET SHALL BE INCLUDED IN THE PRICE BID FOR "STRUCTURAL CONCRETE (BRIDGE)". NO EXTRA PAYMENT WILL BE MADE.			
19. REINFORCING STEEL			
A. REINFORCING STEEL (BLACK BAR) QUANTITY FOR PIER ENCASEMENTS, SEE SH. U.01. FOR			
21.-22. Beams, Pretensioned, Prestressed Concrete Beams A46, A55			
A. BID PRICE TO INCLUDE COST OF COIL RODS, COIL TIES, PREFORMED JOINT FILLER AND ALL BEARING MATERIALS.			
26. Cmp. Entrance Pipe, 18 In. Dia.			
A. SEE STANDARD ROAD PLAN, DR-101,DR-102, DR-104.			
B. ALL CULVERTS TO BE STAKED AND FIELD VERIFIED BEFORE DELIVERY IS TO BE MADE.			
C. ALL CORRUGATED METAL CONNECTING BANDS TO BE MINIMUM OF 24 INCHES IN LENGTH, ANNULAR BANDS ONLY.			
D. ALL PIPE CULVERTS SHALL BE THE GAUGE AND CORRUGATION SHOWN ON THE TABULATION			
E. SEE "TABULATION OF DRAINAGE STRUCTURES BY ROAD CONTRACTOR" FOR ADDITIONAL INFORMATION.			
F. ALL CORRUGATED METAL PIPE CULVERTS SHALL MEET THE REQUIREMENTS OF ASHTO SPECIFICATION M36, TYPE I, ANNULAR RIVETED OR SPIRAL WELDED SEAM PIPE , IN THE GAUGE AND CORRUGATION SHOWN ON THE TABULATION SHEET. HELICAL LOCK SEAM PIPE WILL NOT BE ALLOWED.			
G. ALL PIPE REMOVALS TO BECOME PROPERTY OF THE CONTRACTOR.			
27. Piles, HP 10X57			
A. REFER TO PILING NOTES, SHEET Q.02.			
28. Prebored Holes			
A. SEE SITUATION PLAN FOR DETAILS ON DEPTH OF PREBORED HOLES.			
29. Temporary Sheet Piles and Shoring			
A. REFER TO W SHEETS FOR ANTICIPATED SHEET PILE LOCATIONS. LUMP SUM PAYMENT FOR SHEET PILE AND SHORING WILL BE FULL COMPENSATION FOR FURNISHING AND PLACING ALL TEMPORARY SHEET PILING NECESSARY FOR STAGED CONSTRUCTION, AND FOR REMOVAL OR ABANDONMENT OF SHEET PILING AS NECESSARY TO COMPLETE CONSTRUCTION.			
30. Revetment, Special			
A. SEE " TABULATION OF REVETMENT" FOR LOCATIONS.			
B. RIPRAP SHALL BE PLACED AS SOON AS POSSIBLE AFTER CHANNEL EXCAVATION AND AS ORDERED BY THE ENGINEER.			
C. CONTRACTOR TO MACHINE PLACE, THEN KEY INTO POSITION BY HAND WORKING AS DIRECTED BY THE ENGINEER.			
D. MATERIAL SHALL CONFORM TO THE FOLLOWING GRADATION :			
STONE WT. LBS.			
250			
90			
10			
0%			
70%			
90%			
NO MORE THAN 5% SHALL PASS THE 1/2 INCH SIEVE SCREEN.			
E. METHOD OF MEASUREMENT AND BASIS OF PAYMENT SHALL BE IN ACCORDANCE WITH SECTION 2507 OF THE STANDARD SPECIFICATIONS.			
31. Removal of Pavement			
A. REFER TO TABULATION OF " REMOVAL OF PAVEMENT " FOR LOCATIONS.			
B. CONTRACTOR TO MAKE NEAT SAW CUTS AT LIMITS OF REMOVALS, AS DIRECTED BY THE ENGINEER. SAW CUTS TO BE CONSIDERED INCIDENTAL TO BID ITEM. ALL MATERIAL TO BECOME PROPERTY OF THE CONTRACTOR AND DISPOSED OF BY THE CONTRACTOR. BURYING OF ASPHALTIC MATERIAL WILL NOT BE ALLOWED.			
32. Safety Closure			
A. REFER TO "TABULATION OF SAFETY CLOSURES" FOR LOCATIONS.			
B. CONTRACTOR TO FURNISH, PLACE AND MAINTAIN ALL SIGNS, POSTS, AND BARRICADES. TYPE "A" LOW INTENSITY FLASHING LIGHTS REQUIRED, TWO FOR TYPE III BARRICADES AND ONE FOR ALL OTHER WARNING SIGNS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.			
C. THE CONTRACTOR MAY SUBMIT ALTERNATE SIGNING DETAILS TO COINCIDE WITH THE SCHEDULE OF OPERATIONS FOR ANY VARIATIONS APPROVED OR ORDERED BY THE PROJECT ENGINEER.			
35. Traffic Control			
A. CONTRACTOR TO FURNISH, PLACE AND MAINTAIN ALL SIGNS, POSTS AND BARRICADES. TYPE "A" LOW INTENSITY FLASHING LIGHTS REQUIRED, TWO (2) FOR TYPE III BARRICADES AND ONE (1) FOR ALL OTHER WARNING SIGNS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.			
B. THE CONTRACTOR MAY SUBMIT ALTERNATE SIGNING DETAILS TO COINCIDE WITH THE SCHEDULE OF OPERATIONS FOR VARIATIONS APPROVED OR ORDERED BY THE ENGINEER.			

ESTIMATED QUANTITIES					
LINE NO.	ITEM CODE	ITEM DESCRIPTION	UNIT	TOTAL	AS-BUILT
1	2101-0850001	CLEARING AND GRUBBING	ACRE	1.50	
2	2102-0425070	SPECIAL BACKFILL	TON	495.00	
3	2102-2710070	EXCAVATION, CL 10, RDWY AND BORROW	CY	5,367.00	
4	2102-2713070	EXCAVATION, CLASS 13, ROADWAY AND BORROW	CY	1,431.00	
5	2104-2710020	EXCAVATION, CL 10, CHANNEL	CY	712.00	
6	2105-8425005	TOPSOIL, FURNISH AND SPREAD	CY	750.00	
7	2121-7425020	GRANULAR SHOULDERS, TYPE B	TON	250.00	
8	2301-0690220	BRIDGE APPROACH, SECONDARY ROADS	SY	320.00	
9	2303-0042500	HMA MIXTURE (3,000,000 ESAL) INTERMEDIATE COURSE, 1/2" MIX	TON	458.00	
10	2303-0043500	HMA MIXTURE (3,000,000 ESAL) SURFACE COURSE, 1/2" MIX, NO SL FRICTION REQUIREMENT	TON	153.00	
11	2303-0246422	ASPHALT BINDER, PG 64-22	TON	38.00	
12	2303-6911000	HOT MIX ASPHALT PAVEMENT SAMPLES	LS	1.00	
13	2312-8260051	GRANULAR SURFACING ON ROAD, CLASS A CRUSHED STONE	TON	450.00	
14	2315-8275055	SURFACING, DRIVEWAY	TON	25.00	
15	2401-6745625	REMOVAL OF EXISTING BRIDGE	LS	1.00	
16	2402-2720000	EXCAVATION, CLASS 20	CY	139.00	
17	2402-2721000	EXCAVATION, CLASS 21	CY	207.00	
18	2403-0100010	STRUCTURAL CONCRETE (BRIDGE)	CY	312.60	
19	2404-7775000	REINFORCING STEEL	LB	5,713.00	
20	2404-7775005	REINFORCING STEEL, EPOXY COATED	LB	61,475.00	
21	2407-0551146	BEAMS, PRETENSIONED, PRESTRESSED CONCRETE, A46	EACH	10.00	
22	2407-0551155	BEAMS, PRETENSIONED, PRESTRESSED CONCRETE, A55	EACH	5.00	
23	2408-7800000	STRUCTURAL STEEL	LB	3,985.00	
24	2412-0000100	LONGITUDINAL GROOVING IN CONCRETE	SY	505.00	
25	2414-6424110	CONCRETE BARRIER RAILING	LF	336.90	
26	2417-1040018	CULVERT, CORRUGATED METAL ENTRANCE PIPE, 18 IN DIA.	LF	70.00	
27	2501-0201057	PILES, STEEL, HP 10 X 57	LF	2,240.00	
28	2501-6335010	PREBORED HOLES	LF	100.00	
29	2501-8400170	TEMPORARY SHEET PILES AND SHORING	L.S.	1.00	
30	2507-6850053	REVTMENT, SPECIAL	TON	350.00	
31	2510-6745850	REMOVAL OF PAVEMENT	SY	1,626.00	
32	2518-6910000	SAFETY CLOSURE	EACH	2.00	
33	2526-8285000	CONSTRUCTION SURVEY	LS	1.00	
34	2528-8400256	TEMPORARY TRAFFIC SIGNALS	EACH	2.00	
35	2528-8445110	TRAFFIC CONTROL	LS	1.00	
36	2533-4980005	MOBILIZATION	LS	1.00	
37	2601-2634100	MULCHING	ACRE	1.50	
38	2601-2636043	SEEDING AND FERTILIZING (RURAL)	ACRE	1.50	
39	2602-0000020	SILT FENCE	LF	1,500.00	
40	2602-0010010	MOBILIZATIONS, EROSION CONTROL	EACH	1.00	
41	2602-0010020	MOBILIZATIONS, EMERGENCY EROSION CONTROL	EACH	3.00	

ESTIMATE REFERENCE INFORMATION		PC100-4 07-24-97	
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ITEM NO.	DESCRIPTION		
36. Mobilization			
A. SHALL BE IN ACCORDANCE WITH SECTION 2533 OF THE STANDARD SPECIFICATIONS.			
37., 38. Mulching, Seeding, Fertilizing (Rural)			
A. MULCH TO BE APPLIED AT THE RATE 1 1/2 TONS DRY CEREAL STRAW PER ACRE.			
B. ALL DISTURBED AREAS WITHIN THE RIGHT-OF-WAY AND TEMPORARY RIGHT-OF-WAY SHALL BE SEEDED AND MULCHED.			
39. Silt Fence			
A. SEE TABULATION OF SILT FENCE FOR LOCATIONS			
40.-41. Mobilization, Erosion Control, Emergency Erosion Control			
A. SHALL BE IN ACCORDANCE WITH SECTION 2602 OF THE STANDARD SPECIFICATIONS.			

BR-3660	STATE OF IOWA	FWHA REGION 7	FISCAL YEAR 2016/17	POLK	COUNTY	PROJECT NUMBER	BRM-CO77(203)--8N-77	SHEET NUMBER	C.01
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Plotted By

REMOVAL OF PAVEMENT					
LOCATION STATION TO STATION		AREA (Sq. Yds.)	SAWCUT (Feet)	DISPOSAL	REMARKS
12+00	15+55	846	22'	BY CONTRACTOR	
16+38	19+25	780	22'	BY CONTRACTOR	
TOTAL		1626			

REMOVAL OF EXISTING BRIDGE				
LOCATION		DESCRIPTION		DISPOSAL
ROAD IDENT.	STATION			
NE 102 AVENUE	15+98	80' X 18' TWIN 40' SPAN DECK GIRDER BRIDGE		BY CONTRACTOR

TABULATION OF SAFETY CLOSURES			
Refer to Section 2518 of the Staqndard Specifications			
STATION	CLOSURE TYPE		REMARKS
	ROAD QTY.	HAZARD QTY.	
11+00	1		
23+00	1		
TOTAL	2		

TABULATION OF REVETMENT				
LOCATION		TYPE	QUANTITY	REMARKS
STATION	SIDE		TONS	
15+45	LT / RT	SPECIAL	175	WEST ABUTMENT SLOPES
16+50	LT / RT	SPECIAL	175	EAST ABUTMENT SLOPES
TOTAL			350	

TABULATION OF SILT FENCE				
Location			Length (Lin. Ft.)	Remarks
Station to Station	Left	Right		
11+50 TO 16+30	X		480	
11+50 TO 16+30		X	480	
16+80 TO 19+50	X		270	
16+80 TO 19+50		X	270	
	TOTAL		1500	

BRIDGE APPROACH SECTION

Refer to the BR Series.

* Not a bid item

Location				Approach Pavement					Standard Road Plans BR Series			Subdrain					Modified Subbase	Polymer Grid	Remarks
Bridge Station	End	Skew Ahead		<div>T</div> Thickness	Pay Length	Non- Reinf. Pavement Area	Single- Reinf. Pavement Area	Double- Reinf. Pavement Area				Perforated Subdrain 4"	Subdrain Outlet		Porous Backfill	Class 'A' Crushed Stone Backfill			
		Degrees							Approach	Fixed or Movable Abutment	Abutting Pavement		CY	CY					
		LEFT	RIGHT													Inches			
16+00	WEST		15°	10"	60'	107	73	0	BR-106	F	HMA	50	15+15	LT / RT	10		100	180	
16+00	EAST		15°	10"	60'	107	73	0	BR-107	F	HMA	50	16+85	LT / RT	10		100	180	

DRAINAGE STRUCTURE BY ROAD CONTRACTOR

* Not a bid item

Drainage Area (Acres)	Location	Type	Size	Kind of Pipe	Length New Const.	Bedding Class	Design Cover (H)	Camber Ft.	Apron No.		Apron Guards RF-26*	Elbow* RF-13	Diaphragm RF-7*	Tee Section* RF-21	"D" Section RF-13*	Reducer*	Adaptors* Rf-2		Connected Pipe Joint RF-14*	Flow Line Elevations			Dimensions Lin. Ft.				Skew Ahead		Dike				Class 20	Embank-ment in Place	Remarks
																	Total						Extensions		Degrees		Lt	Rt	Location Station	Top Elevation	Type				
									Inlet	Outlet							Lt.	Lt.		Lt.	Rt.	Lt.	Rt.												
									No.	No.							No.	No.		No.	No.	No.	No.	Type	No.	Type	Lt.	Lt.	Other	Lt.	Lt.	Lt.			
0.5	13+20		18	CMP	40	A	1'													798.4			35'											INLET, FIELD ENTR.	
	13+60																				798.3			35'										OUTLET, FIELD ENTR.	

File Name and Date

br-3650

STATE OF IOWA

FHWA REGION 7

FISCAL YEAR 2016/17

POLK

COUNTY

PROJECT NUMBER

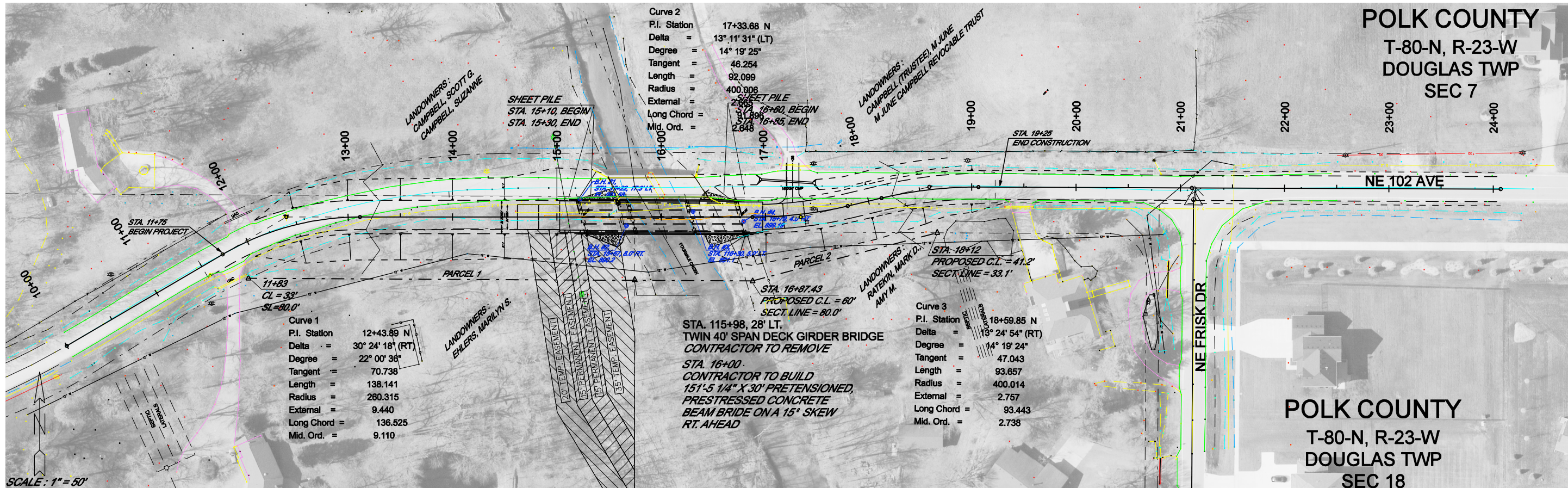
BRM-CO77(203)--8N-77

SHEET NUMBER

C.02

Plotted By

POLK COUNTY
T-80-N, R-23-W
DOUGLAS TWP
SEC 7



POLK COUNTY
T-80-N, R-23-W
DOUGLAS TWP
SEC 18

File Name and Date

F =	29	195	343	453	555	580	602	544	278	0	256	512	420	336	167	32
C =	7	41	40	23	22	26	34	19	13	0	20	49	56	41	19	0

EXCAVATION, CLASS 10
F = 5302 c.y. (30%) = 7,158 c.y.
F = 17+30, ENTR. = 50 c.y.
CUT = 410 c.y.
EXC., CL. 10, CHANNEL = 1,431 c.y.
5,367 c.y.

PI STA. 11+65.08
EL. 901.43
VC = 100.00'

5 - 80' HP 10 X 57
STEEL BEARING PILING (93 TON)
9 - 80' HP 10 X 57
STEEL BEARING PILING (93 TON)

BOTTOM
PREBORED HOLES
EAST ABUT.
EL. 886.07

SCOUR ELEVATION
BOTTOM ENCASEMENTS
EL. 878.00

TOP BERM EL. 898.84
BOTTOM EAST ABUT.
EL. 896.84

BOTTOM
PREBORED HOLES
WEST ABUT.
EL. 886.84

STREAMBED EL. 884.00

EXC. CL. 20
EXC. CL. 21
EL. 885.00

PI STA. 17+80.00
EL. 904.52
VC = 180.00'

BR-3650

STATE OF IOWA

FHWA REGION 7

FISCAL YEAR 2016/2017

POLK

COUNTY PROJECT NUMBER

BRM-CO77(203)-8N-77

SHEET NUMBER

D.01