

Addendum No. 2

ISSUED BY: *Great River Engineering*
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Springfield, Missouri 65804
(417) 886-7171
(417) 886-7591 --- FAX

DATE: January 15, 2025

FOR: **Constructing Bridge #01701191 on Farm Road 17 over Sac River, Greene County, Missouri**
BRO-B039(038)

The attached revisions hereby supersede any and all data with which they may conflict as indicated on the Drawings, Specifications and related documents issued in the original set. Each trade is responsible for changes in its work caused by changes in the work of other trades. This addendum is a part of and shall be attached to the original set of plans and specifications for the work.

Notification: There has been one addendum prior to this addendum.

Question 1: At Bent 4 the bottom of concrete elevation (993.24) appears to be below the top of rock elevation shown on BH-3 (994.71). This appears to show that rock excavation will be required at Bent 4. Is this the intent of the Engineer?

Answer 1: BH-3 was taken at Bent 5, therefore rock elevations may differ at Bent 4. If rock is encountered at similar depths as BH-3, excavation in rock would be required. Based on estimations in the above question, the total amount of excavation in rock to construct Bent 4 would be less than 10 CY. Per MoDOT guidance in EPG Section 751.6.1, no additional bid item is included in these plans for excavation in rock. Any excavation in rock necessary to construct Bent 4 will be paid for at the established unit bid price per MoDOT Standard Specifications for Highway Construction Section 109.16.

Question 2: The BH-2 shows a top of rock elevation at approximately 990.8, and BH-3 shows a top of rock elevation at approximately 994.7. Plan page 19 shows pre-boring piles to elevations of 987.63, 983.43, and 983.24 for Bents 2, 3 and 4 respectively. Using these elevations, the depth of pre-boring through rock for Bents 2, 3, and 4 would be 3 feet, 7.5 feet and 11.5 feet. Is this the intent of the Engineer?

Answer 2: Yes, this is the intent of the Engineer. MoDOT Engineering Design Guidance indicates bridge piling to be extended a minimum of 10 feet below the final grade at the bent. That is the reason for the differing depths of pre-boring through the existing bedrock. Actual bedrock elevations at the bents themselves may differ from what was encountered at BH-2 and BH-3.

Question 3: It appears that one of the H-Pile at Bent 5 will be driven through more than five (5) feet of fill. Will pre-boring be required at that location?

Answer 3: Pre-bore will not be required at Bent 5. It is correct that Pile P6 will be driven through approximately five (5) to six (6) feet of additional fill and eight (8) to nine (9) feet of existing grade. However, because the pile will be driven to bedrock, no pre-bore will be required at this bent.

Question 4: Our grading quantities based on the proposed and existing contours in the plans are considerably higher than the plan quantities. Could the CAD files be made available so that we could verify the grading quantities?

Answer 4: Cut and fill quantities have been revised. A new bid form and updated plan sheets showing the estimated quantities are included with this addendum. CAD files can be provided upon request to Greene County Highway Department.

Question 5: The Invitation to Bid has the following information: “The DBE Goal for the project is 4% and one trainee”. However, the Notice to Bidders item (15) states “The number of trainee hours provided under this contract will be 0 slots at 1000 hours per slot or 0 hours”. Will trainees be required on this project? If so, how many hours will be required and is there a penalty if the required hours are not reached?

Answer 5: The Notice to Contracts item (15) is incorrect. After discussion with MoDOT, 1 trainee required is equal to 1,000 hours of trainee time. Item 15 should be amended to read **“The number of trainee hours provided under this contract will be 1 slot at 1000 hours per slot or 1000 hours.”** This is a requirement of the contract that the awarded contractor must comply with.

Question 6: On Plan Page 48 would we be correct to assume that the reinforcement shown for the bridge approach slab does not apply to the Concrete Approach Pavement, and the only required reinforcement for the Concrete Approach Pavement are the L1 and C1 joints shown on Notes (1) and (2) on page 49?

Answer 6: Yes, you are correct. The only required reinforcing in the concrete approach pavement is the reinforcing called out in notes (1) and (2) on page 49.

RECEIPT OF ADDENDUM:

I have received addendum No. 2 for Constructing Bridge #01701191 on Farm Road 17 over Sac River, Greene County, Missouri.

This addendum involves 5 pages including this sheet detailing the Addendum.

Vendor’s Name

Vendor’s Address

Vendor’s Signature

Date





Greene County
Farm Road 17
BRO-B039(038)

CONTRACTOR NAME: _____
 ADDRESS LINE 1: _____
 ADDRESS LINE 2: _____
 PHONE NUMBER: _____
 EMAIL: _____
 DATE: _____

ITEMIZED BID FORM

LINE	ITEM	DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	AMOUNT
ROADWAY ITEMS						
1	2013000	CLEARING AND GRUBBING	ACRE	1.4	_____	_____
2	2022010	REMOVAL OF IMPROVEMENTS	L.S.	1	_____	_____
3	2035000	UNCLASSIFIED EXCAVATION (ROADWAY)	C.Y.	1087	_____	_____
4	2035500	EMBANKMENT IN PLACE	C.Y.	1927	_____	_____
5	3040163	TYPE 1 AGGREGATE FOR BASE (6 IN. THICK)	S.Y.	1255	_____	_____
6	4011209	BITUMINOUS PAVEMENT MIXTURE PG64-22 (BP-1)	TON	101.4	_____	_____
7	4013000	BITUMINOUS PAVEMENT MIXTURE PG64-22 (BASE)	TON	303.5	_____	_____
8	4071005	TACK COAT	GAL	47	_____	_____
9	5041000	CONCRETE APPROACH PAVEMENT	S.Y.	140	_____	_____
10	6061010	GUARDRAIL TYPE A	L.F.	300	_____	_____
11	6062206	BRIDGE ANCHOR SECTION, 6.5 FT. POSTS (CORRAL RAIL)	EACH	4	_____	_____
12	6062303	ASYMETRICAL TRANSITION SECTION, 6.5 FT. POSTS	EACH	4	_____	_____
13	6063015	TYPE A CRASHWORTHY END TERMINAL	EACH	4	_____	_____
14	6113020	FURNISHING TYPE 2 ROCK BLANKET	C.Y.	1753	_____	_____
15	6113040	PLACING TYPE 2 ROCK BLANKET	C.Y.	1753	_____	_____
16	6161030	TYPE III MOVEABLE BARRICADES W/ WARNING LIGHTS	EACH	10	_____	_____
17	6161005	CONSTRUCTION SIGNS	S.F.	63	_____	_____
18	6181000	MOBILIZATION	L.S.	1	_____	_____
19	8059920	TEMPORARY FERTILIZING, SEEDING AND MULCHING	ACRE	0.8	_____	_____
20	8059930	PERMANENT FERTILIZING, SEEDING AND MULCHING	ACRE	0.8	_____	_____
21	80610061	8 IN. COMPOST FILTER SOCK	L.F.	35	_____	_____
22	8069905	4.5 PSF EROSION CONTROL LINING IN DITCH & SLOPES	S.Y.	81.9	_____	_____
					<i>ROADWAY ITEMS SUBTOTAL</i>	_____
BRIDGE ITEMS						
23	2061000	CLASS 1 EXCAVATION	C.Y.	65	_____	_____
24	2160500	REMOVAL OF BRIDGES (0170119)	L.S.	1	_____	_____
25	5031010A	BRIDGE APPROACH SLAB (MAJOR ROAD)	S.Y.	126	_____	_____
26	7021212	GALVANIZED STRUCTURAL STEEL PILING (12 INCH)	L.F.	503	_____	_____
27	7026000	PRE-BORE FOR PILING	L.F.	170	_____	_____
28	7027000	PILE POINT REINFORCEMENT	EACH	27	_____	_____
29	7032003	CLASS B CONCRETE (SUBSTRUCTURE)	C.Y.	153	_____	_____
30	7034212	SLAB ON STEEL	S.Y.	804	_____	_____
31	7061060	REINFORCING STEEL (BRIDGES)	LBS	8390	_____	_____
32	7121122	FABRICATED STRUCTURAL LOW ALLOY STEEL (PLATE GIRDER) A709, GRADE 50W	LBS	189270	_____	_____
33	7039903	CORRAL RAIL	L.F.	533	_____	_____
34	7151001	VERTICAL DRAIN AT END BENTS	EACH	2	_____	_____
35	7161000	PLAIN NEOPRENE BEARING PAD	EACH	8	_____	_____
36	7162000	LAMINATED NEOPRENE BEARING PAD ASSEMBLY	EACH	12	_____	_____
					<i>BRIDGE ITEMS SUBTOTAL</i>	_____
					TOTAL CONTRACT	_____

Addenda

Signature

- 1 _____
- 2 _____
- 3 _____

GENERAL NOTES

THE CONTRACTOR SHALL FOLLOW THE JOB SPECIAL PROVISIONS FOR THIS PROJECT. FOR ITEMS NOT DIRECTLY COVERED IN THE JOB SPECIAL PROVISIONS THE CONTRACTOR SHALL FOLLOW THE SPECIFICATIONS AS STATED IN THE "MISSOURI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION," 2023 EDITION AND CURRENT SUPPLEMENTAL SPECIFICATION REVISIONS.

TREES

ALL TREES WITHIN PROPOSED R/W ARE TO BE GRUBBED EXCEPT WHERE DIRECTED BY THE ENGINEER. EXCEPTIONALLY GOOD TREES SHALL BE SPARED BY ADJUSTING THE BACKSLOPE LINES DURING CONSTRUCTION. TREES OUTSIDE THE CONSTRUCTION LIMITS SHALL NOT BE GRUBBED UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

FENCES

FENCES SHALL BE MOVED OR ADJUSTED PRIOR TO CONSTRUCTION AS NECESSARY BY THE CONTRACTOR TO FIT THE NEW CONSTRUCTION. TEMPORARY FENCING SHALL BE PROVIDED WHERE EXISTING FENCING IS REMOVED FOR CONSTRUCTION. TEMPORARY FENCING SHALL CONSIST OF AT LEAST 4-STRAND BARB WIRE WITH METAL "1" POST. CONTRACTOR SHALL MAINTAIN TEMPORARY FENCING IN GOOD WORKING CONDITION UNTIL PERMANENT FENCING IS COMPLETED.

BROKEN CONCRETE

NO BROKEN CONCRETE IS ALLOWED IN THE ROCK BLANKET. BROKEN CONCRETE FROM THE PROJECT MAY BE USED IN FILL LOCATIONS AS DIRECTED BY THE ENGINEER AND PLACED PER MODOT SPECIFICATIONS AND JOB SPECIAL PROVISIONS. NO BROKEN CONCRETE SHALL BE BROUGHT TO THE PROJECT.

PERMANENT SIGNING & MARKING

ALL ROADSIDE SIGNS, GUIDEPOSTS, AND MARKERS SHALL REMAIN THE PROPERTY OF THE COUNTY AND THOSE REMOVED WITHIN THE PROJECT AREA SHALL BE STACKED ON SITE FOR PICKUP BY COUNTY FORCES.

TEMPORARY SIGNING

TEMPORARY SIGNING AND MARKING SHALL REMAIN IN PLACE AT ALL TIMES DURING CONSTRUCTION. TEMPORARY SIGNING SHALL BE KEPT CLEAN AND VISIBLE THROUGHOUT CONSTRUCTION. FAILURE TO DO SO WILL RESULT IN WORK STOPPAGE.

UTILITIES

PUBLIC AND PRIVATE UTILITY FACILITIES SHALL BE MOVED OR ADJUSTED PRIOR TO CONSTRUCTION AS NECESSARY BY THE OWNERS TO FIT THE CONSTRUCTION UNLESS NOTED ON THE PLANS OR IN THE PROPOSAL.

THE INFORMATION SHOWN ON THE PLANS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

CONTRACTOR SHALL CONTACT MISSOURI ONE CALL AT 1-800-344-7483 (DIG-RITE), 811 OR MO1CALL.COM AT LEAST THREE DAYS PRIOR TO BEGINNING CONSTRUCTION.

DITCHES

DITCHES MUST BE GRADED FOR POSITIVE DRAINAGE AND IN ACCORDANCE WITH PLANS AND SPECIFICATIONS. DITCH FLOW LINES WITHOUT POSITIVE DRAINAGE WILL NOT BE ACCEPTED AND THE CONTRACTOR WILL BE REQUIRED TO REGRADE THE DITCHES TO PROVIDE POSITIVE DRAINAGE.

DISPOSAL OF EXCESS OR UNSUITABLE MATERIAL

BEFORE REMOVING AND/OR HAULING ANY EXCESS OR UNSUITABLE FILL MATERIAL AWAY FROM THE PROJECT LIMITS, THE CONTRACTOR MUST PROVIDE THE ENGINEER WITH A COPY OF THEIR APPROVED GREENE COUNTY GRADING PERMIT IN ORDER TO IDENTIFY WHERE THE MATERIAL WILL BE DISPOSED OF. ADDITIONALLY, THE CONTRACTOR MUST FURNISH THE ENGINEER WITH A SIGNED COPY OF AN APPROVED WASTE DISPOSAL AGREEMENT EXECUTED BETWEEN THE PROPERTY OWNER AND THE CONTRACTOR. IN THE EVENT THAT THE CONTRACTOR SHOULD ENCOUNTER ANY ASBESTOS CONTAINING MATERIALS OR OTHER HAZARDOUS WASTE WITHIN THE PROJECT LIMITS, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DISPOSE OF THOSE MATERIALS IN A MANNER THAT COMPLIES FULLY WITH THE MISSOURI DEPARTMENT OF NATURAL RESOURCES. IF ABATEMENT IS NECESSARY, THE CONTRACTOR SHALL PROVIDE A CERTIFIED CONTRACTOR SUPERVISOR AND A LICENSED ABATEMENT CONTRACTOR TO PERFORM THE ABATEMENT WORK.

GREENE COUNTY COMPACTION REQUIREMENTS

ALL ROADWAY EMBANKMENT, INCLUDING CURB AND SIDEWALK AREAS, SHALL BE PROPERLY COMPACTED IN LAYERS NOT EXCEEDING 8 INCHES (LOOSE MEASUREMENT) AT THE RECOMMENDED MOISTURE CONTENT WITH COMPACTION TEST RESULTS PROVIDED TO THE GREENE COUNTY HIGHWAY DEPARTMENT. DENSITY AND MOISTURE REQUIREMENTS SHALL BE IN RELATION TO THE MAXIMUM DENSITY AND OPTIMUM MOISTURE AS DETERMINED BY STANDARD PROCTOR COMPACTION TEST. COMPACTION SHALL BE AT LEAST 90 PERCENT OF MAXIMUM DENSITY FOR EMBANKMENT UP TO WITHIN 18 INCHES OF THE SUBGRADE. THE TOP 18 INCHES OF THE EMBANKMENT SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY. ALL EMBANKMENT WITHIN 50 FEET OF ANY BRIDGE OR BOX CULVERT SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY. THE SUBGRADE IN ALL AREAS OF EXCAVATION SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY FOR A DEPTH OF ONE FOOT BELOW SUBGRADE. ALL AGGREGATE BASE ROCK SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY.

ALL BACKFILL OF TRENCHES UNDER ROADBED, CURB, SIDEWALK, OR ANY TRENCH WITHIN 2 FEET OF ANY OF THESE SHALL BE 5/8" TO 3/4" CLEAN CRUSHED AGGREGATE MATERIAL OR EXCAVATABLE FLOWABLE FILL.

COMPACTION TESTS MAY BE REQUIRED AT ANY TIME DEEMED NECESSARY BY THE GREENE COUNTY HIGHWAY DEPARTMENT. THESE TESTS MUST BE PERFORMED BY AN INDEPENDENT LABORATORY. GREENE COUNTY WILL PAY FOR THE FIRST COMPACTION TEST AT A SELECTED SITE. SHOULD THE COMPACTION FAIL TO MEET SPECIFICATIONS, THE CONTRACTOR SHALL RE-COMPACT THE AREA AND PROVIDE A NEW COMPACTION TEST AT ITS EXPENSE. AS AN ABSOLUTE MINIMUM, ONE TEST SHALL BE PERFORMED FOR EVERY 300 LINEAL FEET OF ROADWAY. THE INDEPENDENT LABORATORY CAN WAIVE A TEST BY REPORTING THAT THE EMBANKMENT OR SUBGRADE CONSIST SUBSTANTIALLY OF ROCK.

ROADWAY QUANTITIES

LINE	ITEM	DESCRIPTION	TOTAL	UNITS
1	2013000	CLEARING AND GRUBBING	1.4	ACRE
2	2022010	REMOVAL OF IMPROVEMENTS	1	LUMP SUM
3	2035000	UNCLASSIFIED EXCAVATION (ROADWAY)	1087	CU. YARD
4	2035500	EMBANKMENT IN PLACE	1927	CU. YARD
5	3040163	TYPE 1 AGGREGATE FOR BASE (6 IN. THICK)	1255	SQ. YARD
6	4011209	BITUMINOUS PAVEMENT MIXTURE PG64-22 (BP-1)	101.4	TONS
7	4013000	BITUMINOUS PAVEMENT MIXTURE PG64-22 (BASE)	303.5	TONS
8	4071005	TACK COAT	47	GALLONS
9	5041000	CONCRETE APPROACH PAVEMENT	140	SQ. YARD
10	6061010	GUARDRAIL TYPE A	300	LIN. FOOT
11	6062206	BRIDGE ANCHOR SECTION 6.5 FT. POSTS (CORRAL RAIL)	4	EACH
12	6062303	ASYMMETRICAL TRANSITION SECTION, 6.5 FT. POSTS	4	EACH
13	6063015	TYPE A CRASHWORTHY END TERMINAL	4	EACH
14	6113020	FURNISHING TYPE 2 ROCK BLANKET	1753	CU. YARD
15	6113040	PLACING TYPE 2 ROCK BLANKET	1753	CU. YARD
16	6161030	TYPE III MOVEABLE BARRICADE W/ WARNING LIGHTS	10	EACH
17	6161005	CONSTRUCTION SIGNS	63	SQ. FOOT
18	6181000	MOBILIZATION	1	LUMP SUM
19	8059920	TEMPORARY FERTILIZING, SEEDING & MULCHING	0.8	ACRE
20	8059930	PERMANENT FERTILIZING, SEEDING & MULCHING	0.8	ACRE
21	80610061	8 IN. COMPOST FILTER SOCK	35	LIN. FOOT
22	8069905	4.5 PSF EROSION CONTROL LINING IN DITCH & SLOPES	81.9	SQ. YARD

Survey Control Point Table

Point #	Northing	Easting	Elevation	Description
1	520012.8144	1321700.0390	1007.14	CP 1 60D NAIL
2	520679.9335	1321748.7307	1013.62	CP 2 MAG
3	520641.3454	1322537.7365	1027.22	CP 3 MAG

HORIZONTAL COORDINATES ARE BASED ON THE MISSOURI COORDINATE SYSTEM OF 1983, CENTRAL ZONE (SCALED TO GROUND). GRID FACTOR: 1.00000602

BENCHMARK DATA BM 1 -RAILROAD SPIKE IN EDE POWER POLE #708907, APPROX. 500 FEET SOUTH OF BRIDGE. ELEVATION 1,008.33'

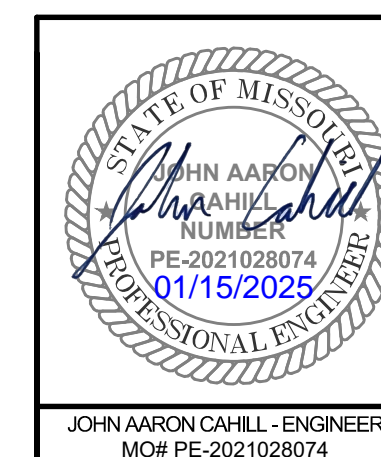
BM 2 -TOP OF 5/8" REBAR, SET BETWEEN LEFT ARROW SIGN POSTS, NORTH OF BRIDGE. ELEVATION 1,013.57' (VERTICAL DATUM: NAVD 88)

DRAWING REVISIONS		
DATE	REMARKS	APPROVED BY
1/15/25	ADDENDUM #2	

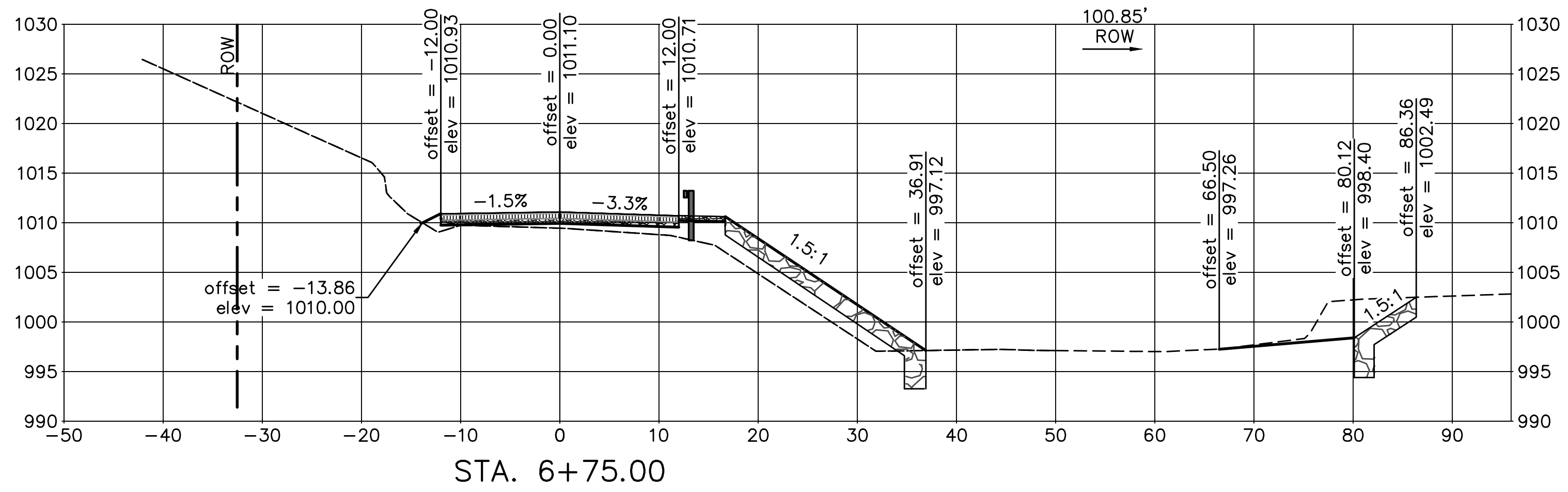
GREENE COUNTY, MISSOURI

BRO-B039(038)
F.R. 17 BRIDGE #01701191
OVER SAC RIVER

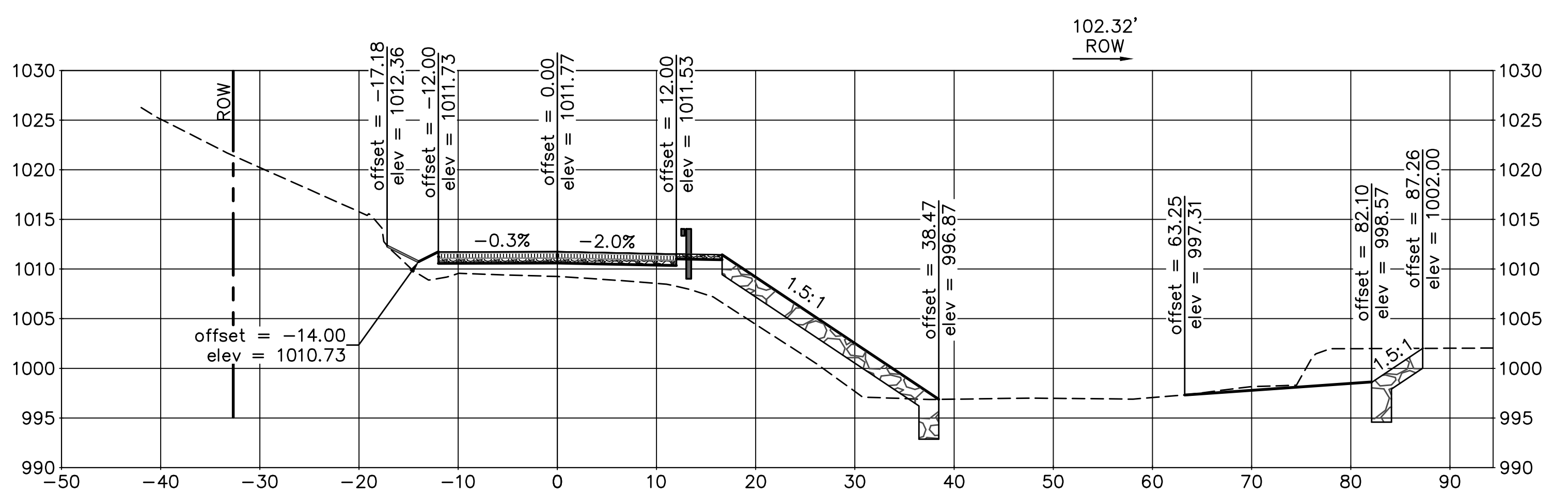
SUMMARY OF QUANTITIES



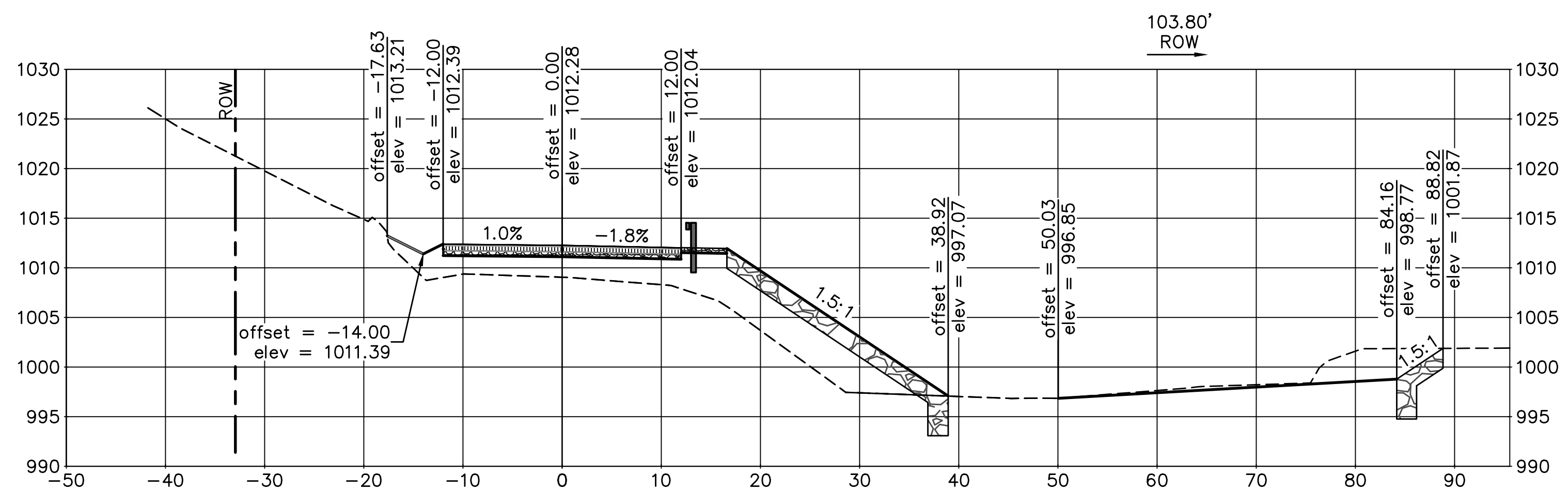
SURVEY BY	DESIGN	AP	SCALES	SHEET	2
JOB NO. 4174	DRAWN	KFB	HOR. NOTED	OF	57 SHEETS
08.05.2020	CHECKED	JAB	VERT. NOTED	FILE NO.	



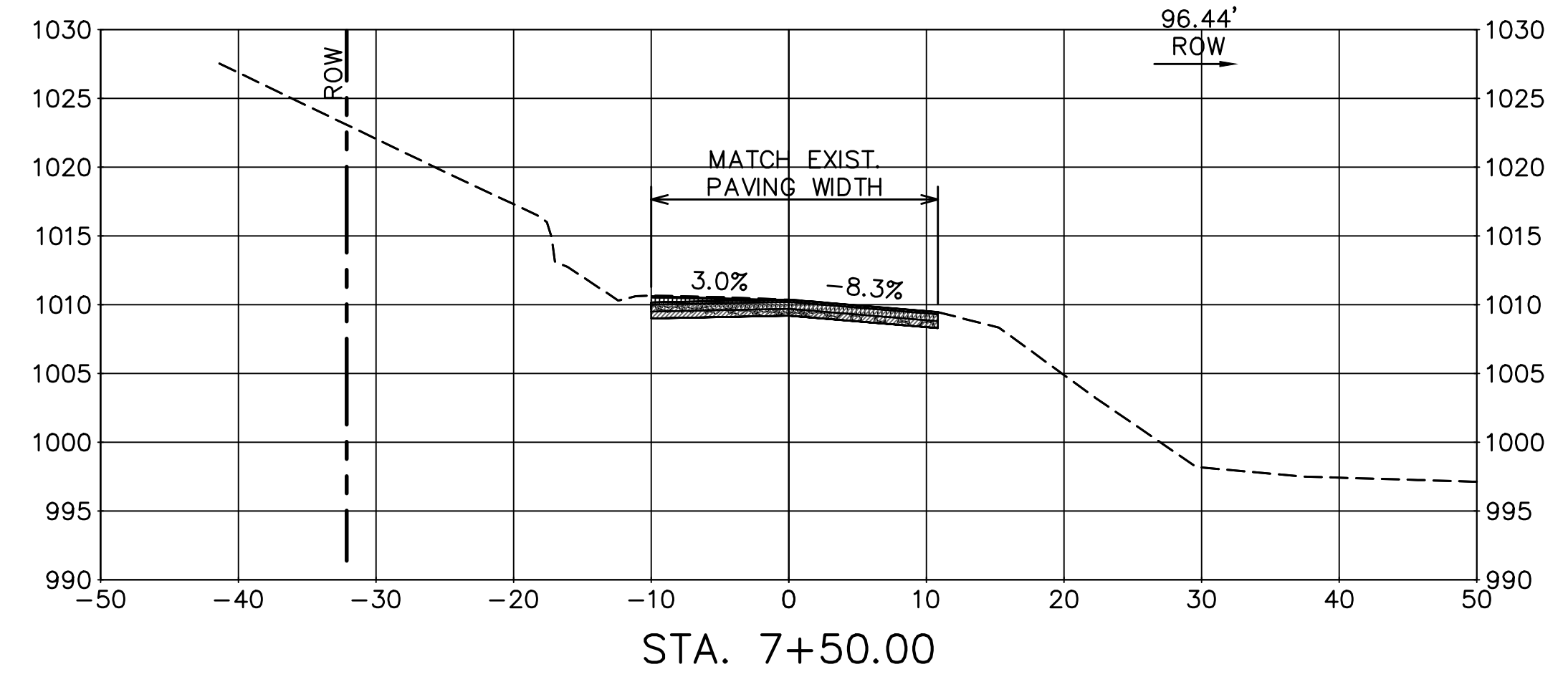
STA. 6+75.00



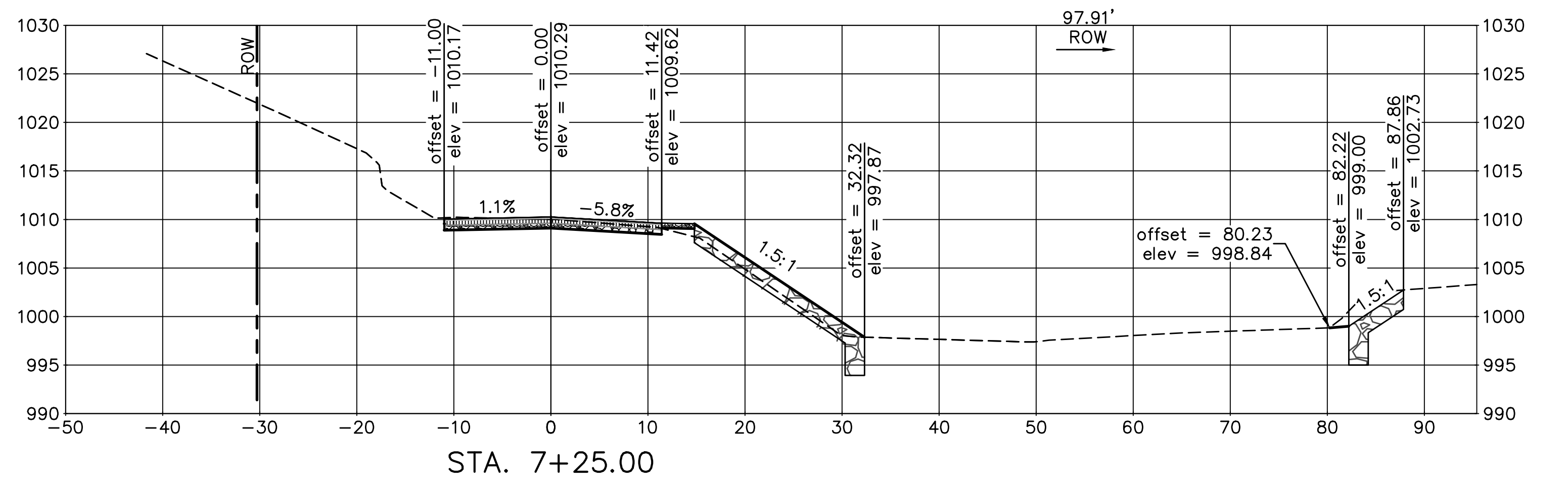
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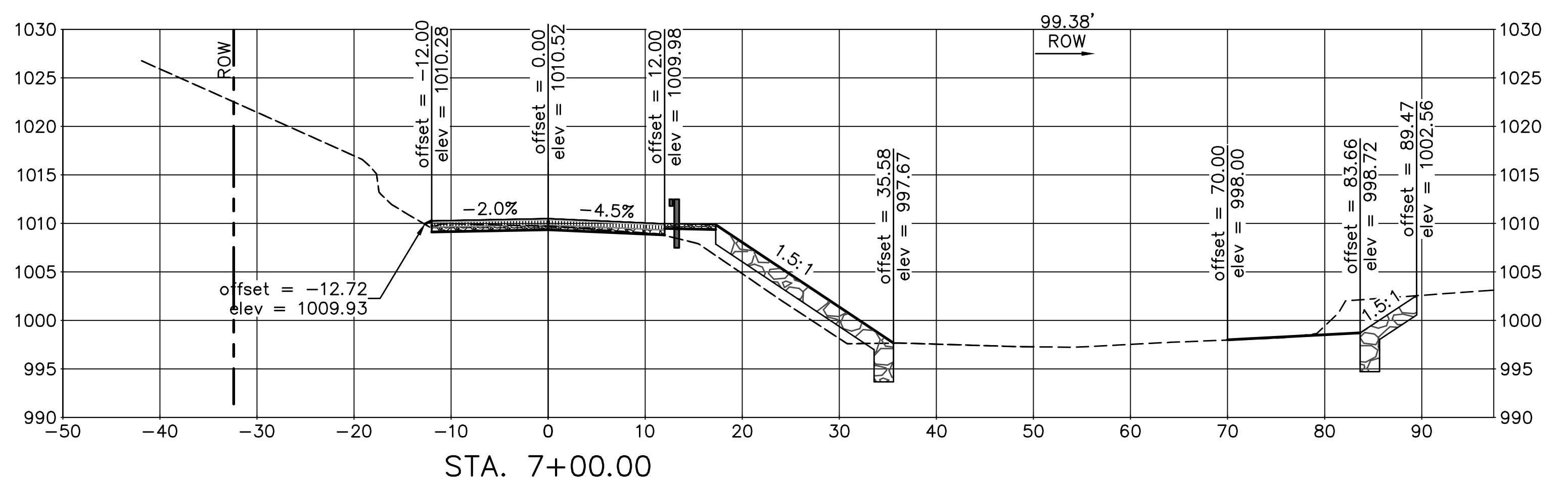
STA. 6+25.00



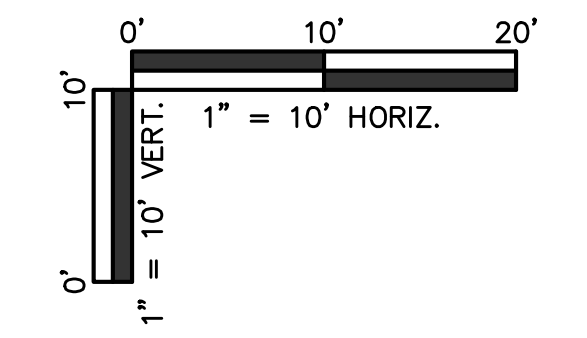
STA. 7+50.00



STA. 7+25.00



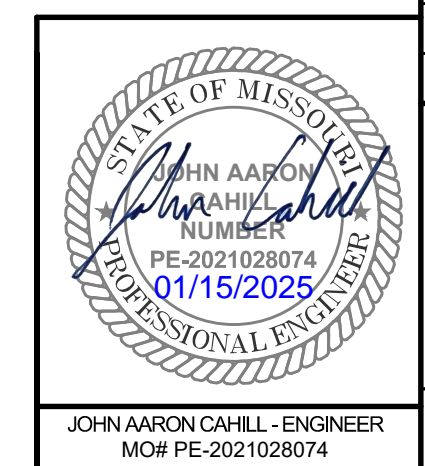
STA. 7+00.00



EARTHWORK QUANTITIES
 CUT = 1087 CY
 FILL = 1927 CY
 NO ADJUSTMENT HAS BEEN MADE FOR SHRINKAGE OR SWELL

DRAWING REVISIONS		
DATE	REMARKS	APPROVED BY
1/15/25	ADDENDUM #2	

GREENE COUNTY, MISSOURI
 BRO-B039(038)
 F.R. 17 BRIDGE #01701191
 OVER SAC RIVER



CROSS SECTIONS

SURVEY BY	DESIGN	AP	SCALES	SHEET
JOB NO. 4174	DRAWN	KFB	HOR. NOTED	OF 57 SHEETS
08.05.2020	CHECKED	JAB	VERT. NOTED	FILE NO.