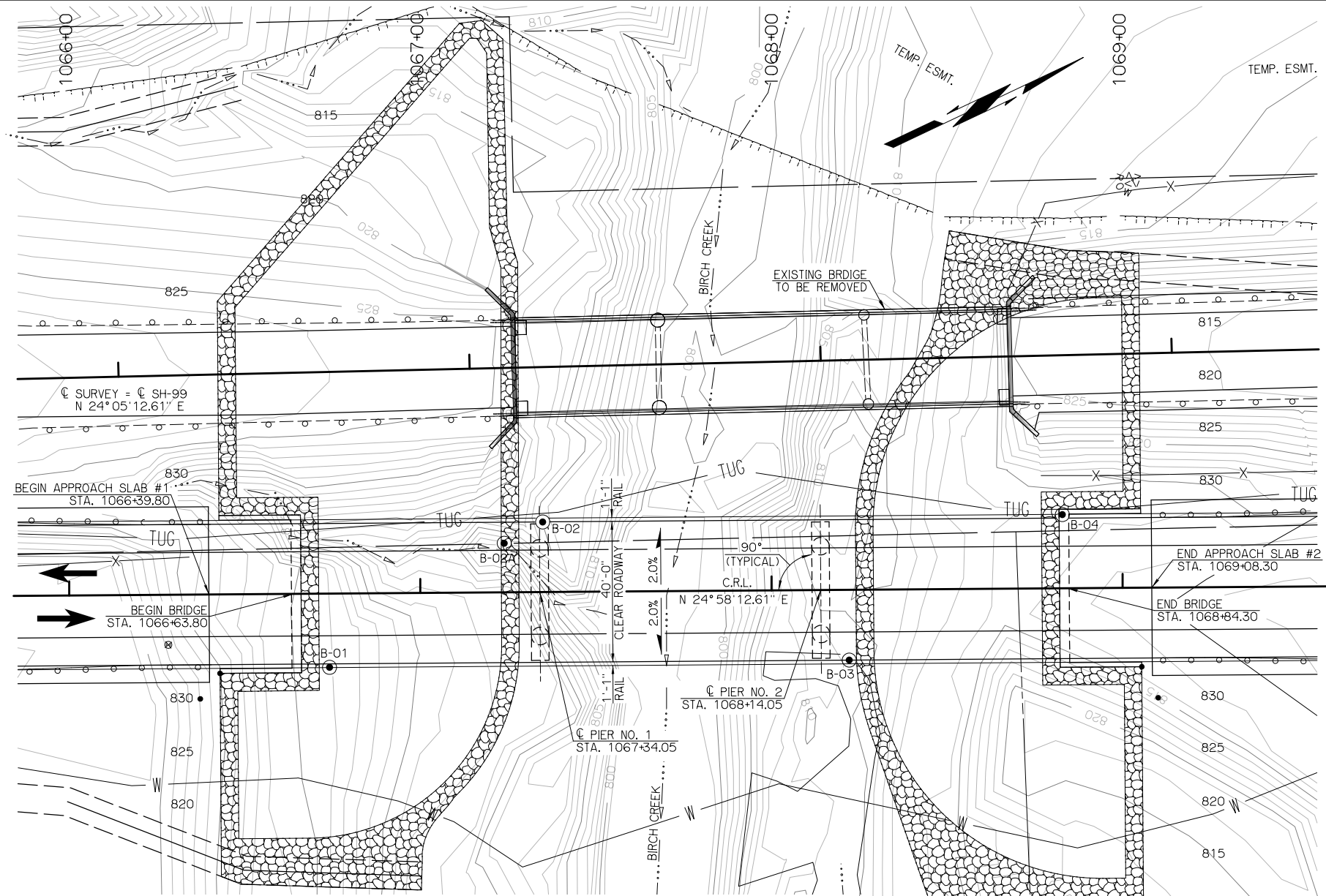


REV. NO.	DESCRIPTION	REVISIONS	DATE



INDEX OF BRIDGE SHEETS

SHEET #	DESCRIPTION
4	BRIDGE GENERAL NOTES (BRIDGE)
5	BRIDGE PAY QUANTITIES (BRIDGE)
111	GENERAL PLAN AND ELEVATION BRIDGE "C"
112	FOUNDATION REPORT - BRIDGE "C" (SHEET 1 OF 3)
113	FOUNDATION REPORT - BRIDGE "C" (SHEET 2 OF 3)
114	FOUNDATION REPORT - BRIDGE "C" (SHEET 3 OF 3)
115	SUBSTRUCTURE STAKING DIAGRAM BRIDGE "C"
116	PIER NO. 1 AND 2 DETAILS BRIDGE "C"
117	PIER SECTIONS AND DETAILS BRIDGE "C"
118	TYPICAL CROSS SECTION BRIDGE "C"
119	DECK SLAB REINFORCING STEEL LAYOUT - BRIDGE "C" (SHEET 1 OF 2)
120	DECK SLAB REINFORCING STEEL LAYOUT - BRIDGE "C" (SHEET 2 OF 2)

HYDRAULIC DATA

D.A.	= 12.02 SQ. MI.
CONTROLLED D.A.	= 0.00 SQ. MI.
EFFECTIVE D.A.	= 12.02 SQ. MI.
Q2	= 1,200 CFS
V2	= 4.30 FPS
CHW2	= 806.46 FT.
Q5	= 2,470 CFS
V5	= 5.33 FPS
CHW5	= 809.73 FT.
Q10	= 3,550 CFS
V10	= 5.67 FPS
CHW10	= 811.78 FT.
Q25	= 5,250 CFS
V25	= 6.20 FPS
CHW25	= 814.23 FT.
Q50	= 6,780 CFS
V50	= 6.49 FPS
CHW50	= 816.10 FT.
Q100	= 8,470 CFS
V100	= 6.91 FPS
CHW100	= 817.75 FT.
Q500	= 13,300 CFS
V500	= 7.85 FPS
CHW500	= 821.66 FT.
Q0T	= 34,815 CFS
V0T	= 11.61 FPS
CHW0T	= 832.13 FT.
LOW BEAM ELEV.	= 826.37 FT.
ROADWAY O.T. ELEV.	= 832.13 FT.

BRIDGE STANDARD DRAWINGS

LECS-4-1	B40-I-PCB-DTL-01E
TR4-2-00E	B40-I-ADIA-PC4-I-02E
HPI-2-01E	B40-I-ADIA-PC4-2-02E
B40-I-ABUT-PC4-I-01E	B40-I-DIA-PCB-01E
B40-I-ABUT-PC4-2-01E	B40-I-BRG-PC4BT-02E
B40-I-ABUT-MISC-01E	B40-I-SPR-QUAN-PCB-IV-03E
B40-I-LSECT-PCB-03E	B40-I-AS-03E
B40-I-PCB-IV-70-02E	B40-I-TR4-0-PC45-02E
B40-I-PCB-IV-80-02E	

LOAD AND RESISTANCE FACTOR DESIGN DATA

CLASS AA CONCRETE	F _c = 4000 P.S.I.
CLASS A CONCRETE	F _c = 3000 P.S.I.
REINFORCING STEEL (GRADE 60)	F _y = 60,000 P.S.I.
STRUCTURAL STEEL M270 (GRADE 50)	F _y = 50,000 P.S.I.

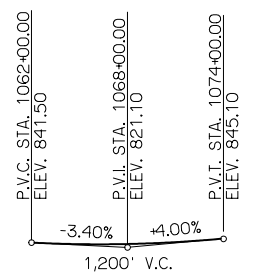
LOADING: HL-93 OR OKLAHOMA OVERLOAD TRUCK AND 20 P.S.F. FUTURE WEARING SURFACE.
 DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SIXTH EDITION.
 ANSI/AASHTO/AWS D 1.5 BRIDGE WELDING CODE
 LFD OPERATING RATING: HS 38.3

SCOUR DATA

Q100 PIER SCOUR	= 8.6 FT.
Q100 CONT. SCOUR	= 1.4 FT.
Q100 TOTAL SCOUR	= 10.0 FT.
Q500 PIER SCOUR	= 9.6 FT.
Q500 CONT. SCOUR	= 2.8 FT.
Q500 TOTAL SCOUR	= 12.4 FT.

FOUNDATION DATA

ABUTMENTS (HP 10X42 PILING)	ABUT #1	ABUT #2	UNIT
FACTORED PILE REACTION	77.3	77.3	TONS/PILE
PIERS (60" DIA. DRILLED SHAFTS)	PIER #1	PIER #2	UNIT
FACTORED SHAFT REACTION	402.6	402.6	TONS/SHAFT
NOMINAL UNIT BEARING RESISTANCE	60.0	60.0	TSF
BEARING RESISTANCE FACTOR	0.7	0.7	
FACTORED BEARING RESISTANCE	824.6	824.6	TONS/SHAFT
NOMINAL UNIT FRICTION RESISTANCE	9.0	9.0	TSF
FRICTION RESISTANCE FACTOR	0.45	0.45	
FACTORED FRICTION RESISTANCE	445.3	445.3	TONS/SHAFT
DEPTH OF ROCK NEGLECTED FOR FRICTION	3.0	3.0	FT
TOTAL FACTORED RESISTANCE	1270	1270	TONS/SHAFT



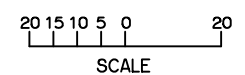
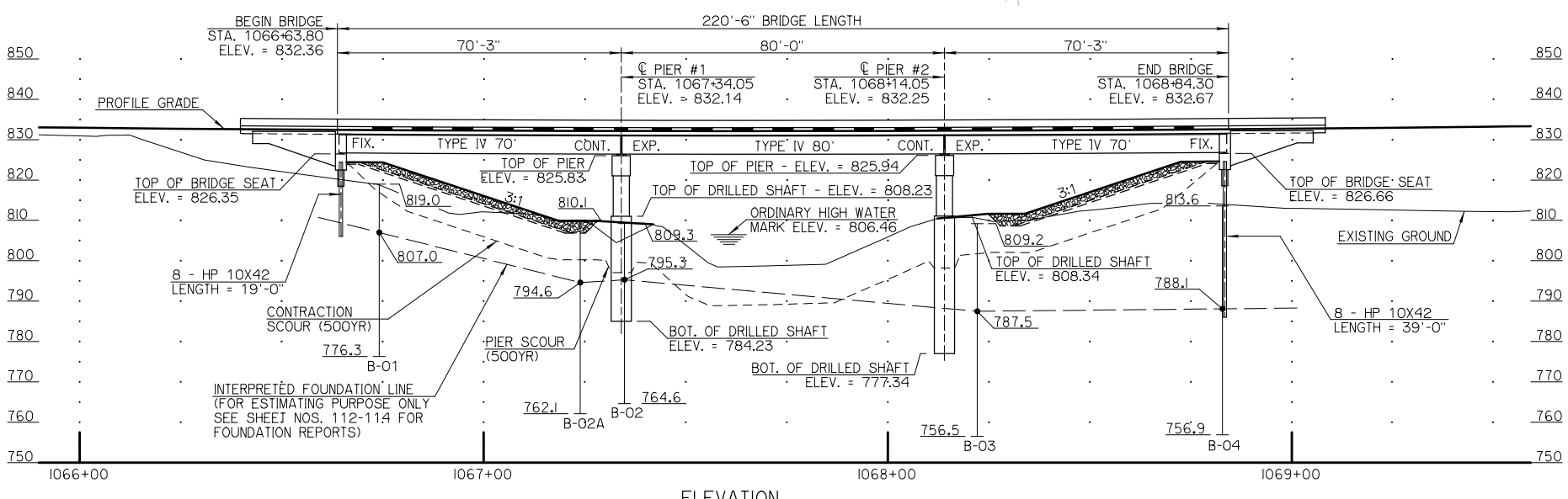
UTILITIES

UNDERGROUND TELEPHONE
 WATER LINE

BM #11 80D NAIL IN 30" TREE
 77' RT. C. SURVEY STA. 1066+12 ELEV. = 830.362

BM #12 80D NAIL IN 22" TREE
 64' RT. C. SURVEY STA. 1073+35 ELEV. = 846.599

BM #0-57-27 ODOT BRASS MONUMENT STAMPED "0-57-27"
 18' RT. C. SURVEY STA. 1067+10 ELEV. = 825.555



SH-99 OVER BIRCH CREEK OSAGE COUNTY
 C. BRIDGE STA. 1067+74.05
GENERAL PLAN AND ELEVATION
BRIDGE "C"
 3 SPANS (70'-80'-70') TYPE IV P.C. BEAMS
 40' CLEAR ROADWAY WITH TR4 TRAFFIC RAIL, SKEW 0°
 NO. 5730 1228X NBI 30315

Design	SBH	5/12
Detail	RJM	5/12
Check	SBH	5/12
Squad
Engr.

STATE OF OKLAHOMA DEPARTMENT OF TRANSPORTATION
 JOB PIECE NO. 24261(04) SHEET NO. 111

Plotted By: rdm Date: 6/7/2017 4:52:43 PM
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