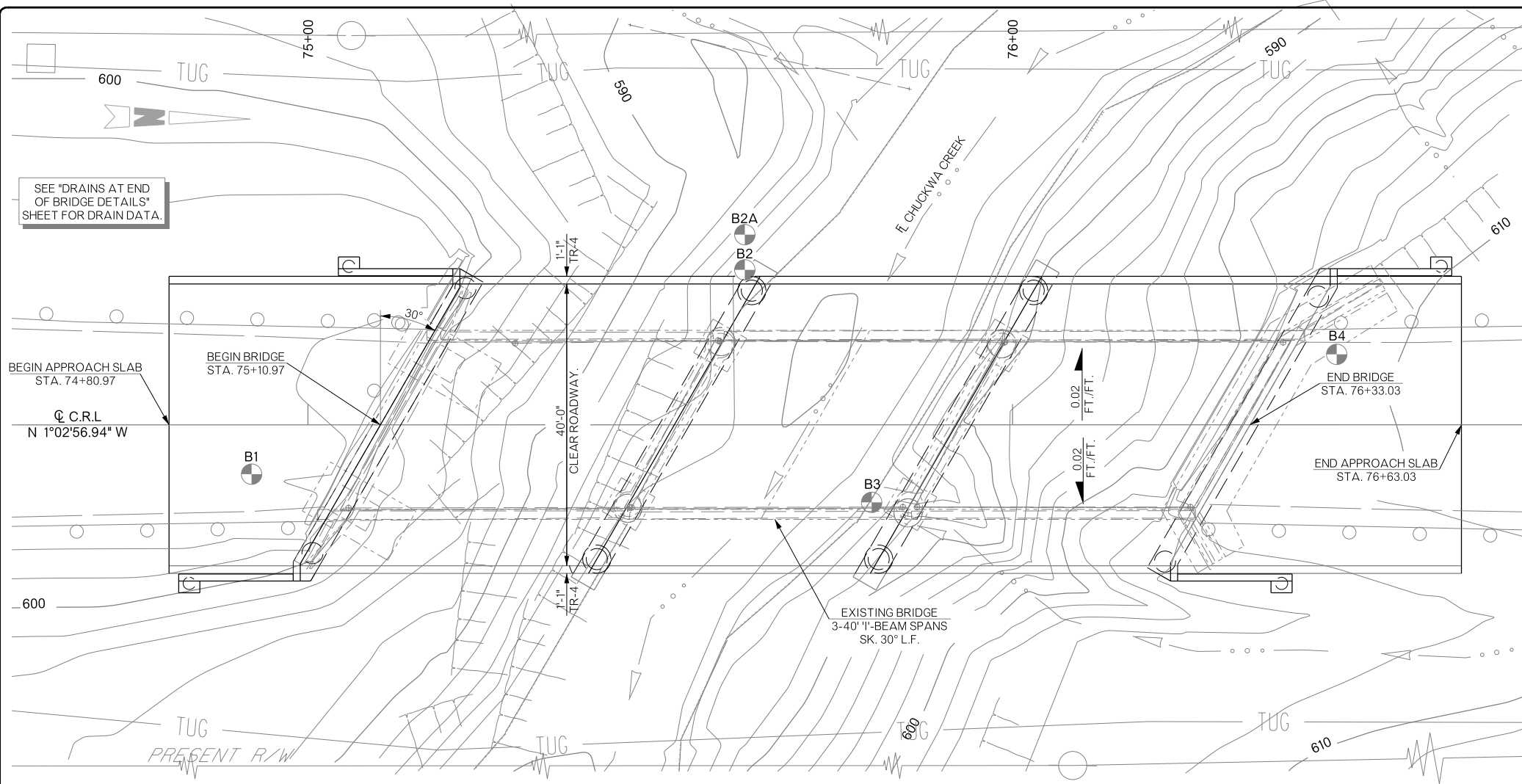


REVISIONS		
REV. NO.	DESCRIPTION	DATE



INDEX OF SHEETS

NO.	SHEET NAME
0001	TITLE
AB01-AB02	GENERAL NOTES AND SUMMARY OF PAY QUANTITIES (BRIDGE)
B001	GENERAL PLAN AND ELEVATION
B002-B004	FOUNDATION REPORT
B005	SUBSTRUCTURE STAKING DIAGRAM
B006-B009	ABUTMENT NO. 1 DETAILS
B010-B013	ABUTMENT NO. 2 DETAILS
B014-B015	SUBSTRUCTURE EXCAVATION DETAILS
B016-B018	PIER DETAILS
B019-B021	SUPERSTRUCTURE DETAILS
B022	DIAPHRAGM DETAILS
B023	ROLLED BEAM DETAILS
B024	BEARING DETAILS
B025	APPROACH SLAB DETAILS
B026	DRAINS AT END OF BRIDGE DETAILS

FOUNDATION DATA

ABUTMENTS (30" DIAMETER DRILLED SHAFTS)

	ABUT. NO. 1	ABUT. NO. 2
FACTORED REACTION (TON/SHAFT)		
AT TOP OF SHAFT (TONS/SHAFT)	= 45	= 72
AT BOTTOM OF SHAFT (TONS/SHAFT)	= 65.3	= 78.5
END BEARING		
RESISTANCE FACTOR	= 0.7	= 0.7
NOMINAL UNIT RESISTANCE (TSF)	= 60.0	= 38.2
FACTORED END BEARING (TONS/SHAFT)	= 206.2	= 131.1
SIDE FRICTION		
TEXAS CONE "N" (IN./100 BLOWS)	= 6.3	= 6.3
RESISTANCE FACTOR	= 0.45	= 0.45
NOMINAL UNIT RESISTANCE (TSF)	= 3.1	= 3.1
FACTORED FRICTION (TONS/SHAFT)	= 77.0	= 27.5
TOTAL RESISTANCE	= 283.1	= 158.6

UTILITIES

- Telephone - AT&T
- Chickasaw Telephone
- Communicomm
- Water - City of Durant
- Electric - OG&E

STANDARDS

- B40-STL-BM-BRACING-00E
- EJ-DTL-01E
- EJ-SK-03E
- GHW1-1-00
- GHW2-1-00
- LECS-4-1
- SKT-1-00
- THR1-1-02
- TR4-2-00E

ABUTMENT WINGS (18" DIAMETER DRILLED SHAFTS)

	ABUT. NO. 1	ABUT. NO. 2
FACTORED REACTION (TON/SHAFT)		
AT TOP OF SHAFT (TONS/SHAFT)	= 10	= 10
AT BOTTOM OF SHAFT (TONS/SHAFT)	= 16.5	= 12.8
END BEARING		
RESISTANCE FACTOR	= 0.7	= 0.7
NOMINAL UNIT RESISTANCE (TSF)	= 60.0	= 38.2
FACTORED END BEARING (TONS/SHAFT)	= 74.2	= 47.2
SIDE FRICTION		
TEXAS CONE "N" (IN./100 BLOWS)	= 6.3	= 6.3
RESISTANCE FACTOR	= 0.45	= 0.45
NOMINAL UNIT RESISTANCE (TSF)	= 3.1	= 3.1
FACTORED FRICTION (TONS/SHAFT)	= 9.9	= 9.9
TOTAL RESISTANCE	= 84.1	= 57.1

PIERS (48" DIAMETER DRILLED SHAFTS)

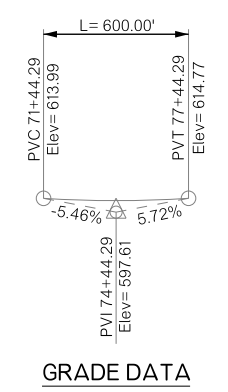
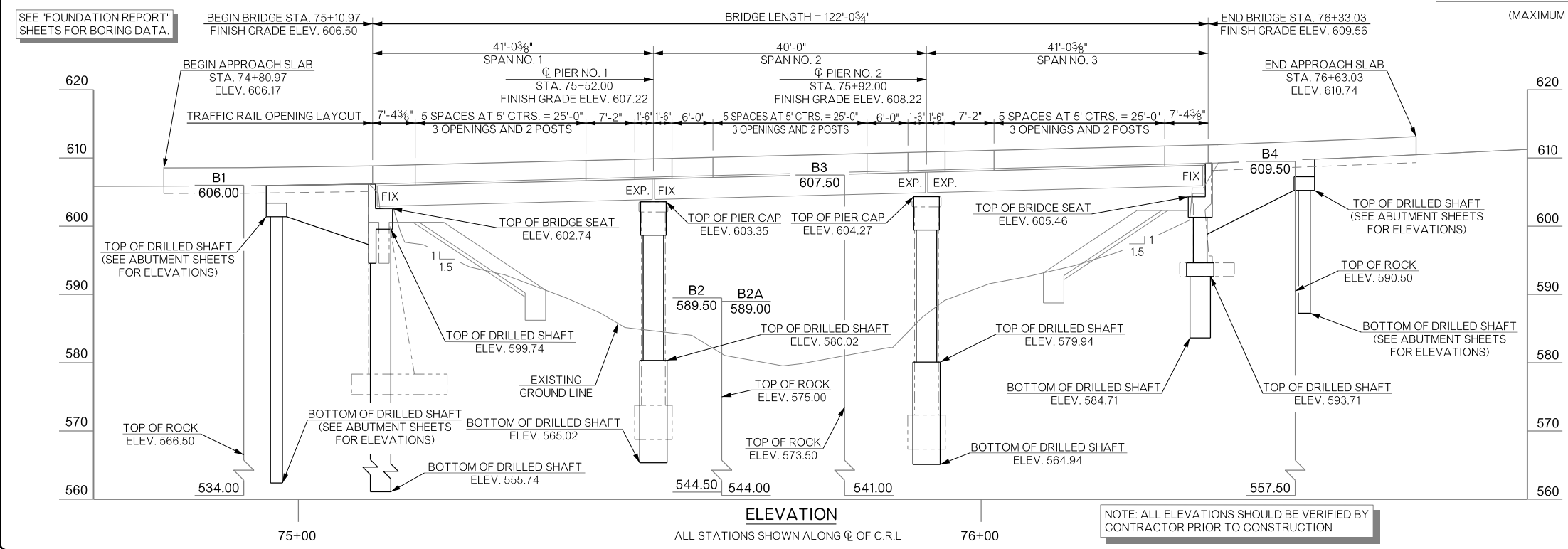
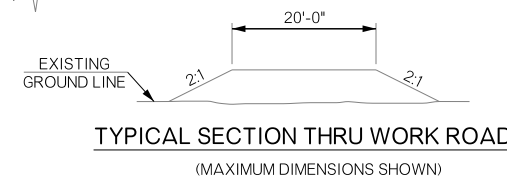
	PIER NO. 1	PIER NO. 2
FACTORED REACTION (TON/SHAFT)		
AT TOP OF SHAFT (TONS/SHAFT)	= 88	= 88
AT BOTTOM OF SHAFT (TONS/SHAFT)	= 115.1	= 116.9
END BEARING		
RESISTANCE FACTOR	= 0.7	= 0.7
NOMINAL UNIT RESISTANCE (TSF)	= 27	= 27
FACTORED END BEARING (TONS/SHAFT)	= 237.1	= 237.1
SIDE FRICTION		
TEXAS CONE "N" (IN./100 BLOWS)	= 6.3	= 6.3
RESISTANCE FACTOR	= 0.45	= 0.45
NOMINAL UNIT RESISTANCE (TSF)	= 3.1	= 3.1
FACTORED FRICTION (TONS/SHAFT)	= 70.4	= 70.4
TOTAL RESISTANCE	= 307.5	= 307.5

PLAN

ALL STATIONS SHOWN ALONG C/L OF C.R.L.

BENCH MARK:
 BM4 DEL. POST
 289' RT. STA. 80+06 ELEV. 625.29

BENCH MARK:
 BM3 BRASS CAP ON SW WING OF CHUCKWA CREEK BRIDGE
 15' LT. STA. 75+20 ELEV. 606.55



DESIGN DATA

- CLASS AA CONCRETE $f'_c = 4$ KSI
- CLASS A CONCRETE $f'_c = 3$ KSI
- REINFORCING STEEL (GRADE 60) $f_y = 60$ KSI
- STRUCTURAL STEEL M270 (GRADE 50W) $F_y = 50$ KSI
- STAINLESS STEEL A240 (TYPE 316) $F_y = 30$ KSI
- LOADING - HL-93 OR OKLAHOMA OVERLOAD TRUCK
- 20 PSF FUTURE WEARING SURFACE
- 5 PSF STAY-IN-PLACE FORMS
- DESIGN - AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 6TH EDITION WITH INTERIM REVISIONS
- ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE
- ANSI/AWS D1.6 STRUCTURAL WELDING CODE - STAINLESS STEEL
- LFD OPERATING RATING - HS 54.0

BRIDGE "A" SH-78 OVER CHUCKWA CREEK		BRYAN COUNTY	
GENERAL PLAN AND ELEVATION			
WIDEN EXISTING (3)-40' I-BEAM SPANS X 24'-0" CLEAR ROADWAY TO 40'-0" CLEAR ROADWAY W/ TR-4 TRAFFIC RAIL, 30°SKEW, C/L BRIDGE STATION 75+72.00			
Design	CJO	6/15	Squad: HENSLEY Engr: DEFRANCO
Detail	DPG	8/15	
Check	TEE	9/15	
STATE OF OKLAHOMA		DEPARTMENT OF TRANSPORTATION	
JOB/PIECE NO. 27912(04)		SHEET NO. B001	

NOTE: ALL ELEVATIONS SHOULD BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION