

DIST. NO. #2 COMMISSIONER: JOHN MEDDERS

LOCAL GOV'T. - SHANNON SHEFFERT, DIVISION ENGINEER
LOCAL GOV'T. - GREG MASSEY, AREA MANAGER

REVIEWED BY:
P.E. NO. 29946(01)

SURVEY CONTROL DATA

1. HORIZONTAL CONTROL:
 - A. HORIZONTAL CONTROL FOR THIS SURVEY IS BASED ON THE NGS OKLAHOMA STATE PLANE COORDINATE SYSTEM, NAD83 (1993), LAMBERT PROJECTION (SOUTH ZONE). USING UNCONSTRAINED DIFFERENTIAL COORDINATES.
 - B. ACCURACY - THE PRIMARY CONTROL NETWORK, THE SECONDARY CONTROL NETWORK AND SECTION BOUNDARIES FOR THIS SURVEY ARE IN GENERAL COMPLIANCE WITH THE NGS SECOND ORDER, CLASS II STANDARDS FOR HORIZONTAL CONTROL (1:20,000).
2. BEARINGS:

THE BEARINGS SHOWN HEREIN OR HEREON ARE GRID BEARINGS DERIVED FROM THE NGS OKLAHOMA STATE PLANE COORDINATE SYSTEM AND ARE NOT ASTRONOMICAL.
3. VERTICAL CONTROLS:
 - A. LEVEL DATUM IS NAVD 88.
 - B. ACCURACY - VERTICAL CONTROL FOR THIS SURVEY IS WITHIN THE CLOSURE REQUIREMENT OF NOAA/NGS *CLASSIFICATION, STANDARDS OF ACCURACY, AND GENERAL SPECIFICATIONS OF GEODETIC CONTROL SURVEYS* (FEB. 1974, REPRINTED FEB. 1977) THIRD ORDER STANDARDS AS A MINIMUM.

DESIGN DATA

ADT 2015 = 199
 ADT 2035 = 296
 V = 40 mph

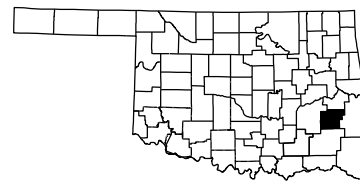
(20 YR.)

SCALES

PLAN 1" = 100'
 PROFILE HOR. 1" = 100'
 VER. 1" = 10'
 LAYOUT MAP 1" = 5280

CONVENTIONAL SYMBOLS

- PROPOSED ROAD
- RAILROADS
- RANGE & TOWNSHIP SECTION LINES
- QUARTER SECTION LINES
- x- FENCES
- GROUND LINE
- EXISTING ROADS
- BASE LINE
- GRADE LINES
- TELEPHONE & TELEGRAPH
- POWER LINES
- BUILDINGS
- ▭ DRAINAGE STRUCTURES - IN PLACE
- ▭ DRAINAGE STRUCTURES - NEW
- ▭ PRES. R/W
- ▭ R/W
- ▭ RIGHT-OF-WAY LINES - EXISTING
- ▭ R/W
- ▭ RIGHT-OF-WAY LINES - NEW
- ✕ RIGHT-OF-WAY FENCE



LOCATION MAP

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED
COUNTY BRIDGE

PROJECT NO. STP-239D(032)CI

STATE JOB NO. 29946(04)

BRIDGE AND APPROACHES

LATIMER COUNTY

BRIDGE OVER LIMESTONE CREEK

LATITUDE 34° 53' 02"

LONGITUDE -95° 22' 58"

OLD NBI NO. 07077

NEW NBI NO. 31473

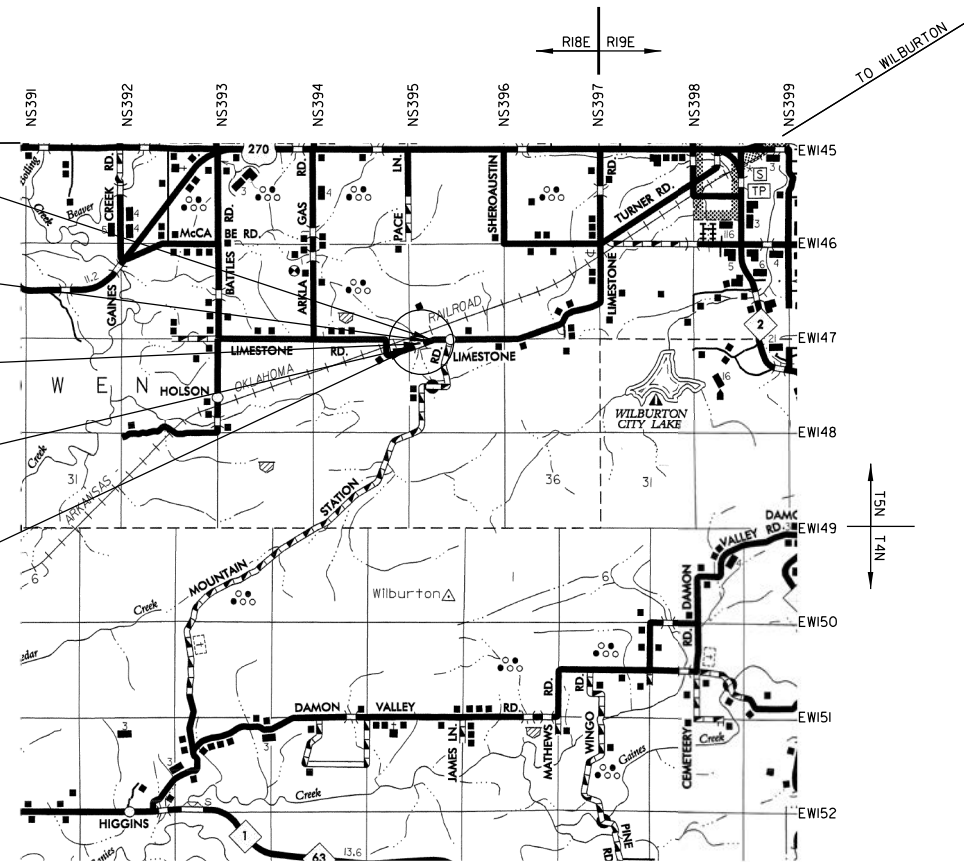
CRL STA. 106+97.45, =
 C SURVEY STA. 8+02.24
 END INCIDENTAL CONSTRUCTION

CRL STA. 106+47.45, =
 C SURVEY STA. 7+52.24
 BEGIN INCIDENTAL CONSTRUCTION
 END STATE J/P NO. 29946(04)

END BRIDGE STA. 103+74.55
 BRIDGE LENGTH = 63.17'
 BEGIN BRIDGE STA. 103+11.38

CRL STA. 100+53.40, =
 C SURVEY STA. 1+58.23
 END INCIDENTAL CONSTRUCTION
 BEGIN STATE J/P NO. 29946(04)

CRL STA. 100+03.40, =
 C SURVEY STA. 1+08.23
 BEGIN INCIDENTAL CONSTRUCTION



ROADWAY LENGTH 530.88 FT 0.101 MI
 BRIDGE LENGTH 63.17 FT 0.012 MI
 PROJECT LENGTH 594.05 FT 0.113 MI
 EQUATIONS: NONE
 EXCEPTIONS: NONE

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
0001	TITLE SHEET
0002	TYPICAL SECTION
AB01	SUMMARY OF PAY QUANTITIES - BRIDGE
AR01	SUMMARY OF PAY QUANTITIES - ROADWAY
B001	GENERAL PLAN AND ELEVATION
B002	STAKING LAYOUT
B003	APPROACH SLAB DETAILS
B004	BORING LOG
R001	PLAN AND PROFILE
R002	EROSION CONTROL
S001	SURVEY DATA
X001-X002	CROSS SECTIONS

DESCRIPTION	REVISIONS	DATE

THE FOLLOWING STANDARD
 DRAWINGS WILL BE PART OF THIS PROJECT:
 2009 STANDARDS

ROADWAY	TRAFFIC	BRIDGE
ASCD-5-2	GET-2-OIE	CB26-C-SKO-ABUT-PC2-02E
SSS-1-1	GRHI-1-00	CB26-C-SKO-XSECT-PC234-01E
TSC2-3-2	GRH2-1-00	CB26-C-SKO-LSECT-PCB-01E
TSD-2-0	GRH3-1-0E	CB26-C-SKO-DKSLB-BLIST-01E
	TCSI-1-01	CB26-C-SKO-DIA-END-PC234-01E
	TCS4-1-01	CB26-C-SKO-SPR-QUAN-PCB-1-01E
	TCS5-1-00	CB26-C-SKO-SPR-QUAN-PCB-2-01E
	TCS7-1-02	CB26-C-SKO..30-PCB-II-60-01E
	TCS8-1-00	CB26-C-SKO..30-DIA-INT-PCB-01E
	TCS9-1-01	CB26-C-SKO..30-BRG-PC2-01E
	TCSI-1-01	CB26..32-C-SKO-WING-PC2-01E
	TCSI4-1-00	CB26..32-C-SKO-ABUT-MISC-01E
		CB26..32-C..I-SKO..30-PCB-DTL-I-01E
		CB26..32-C..I-SKO..30-PCB-DTL-2-01E
		CB26..32-C..I-SKO..30-GRAU-BC-00E
		HPI-2-00E
		TR3-2-01E

APPROVED:

THIS 24th DAY OF April 2017

BOARD OF COUNTY COMMISSIONERS
LATIMER COUNTY, OKLAHOMA

CHAIRMAN
 MEMBER
 MEMBER
 AT-LARGE
 COUNTY CLERK

JOHN R. WINTERS
 14040
 OKLAHOMA

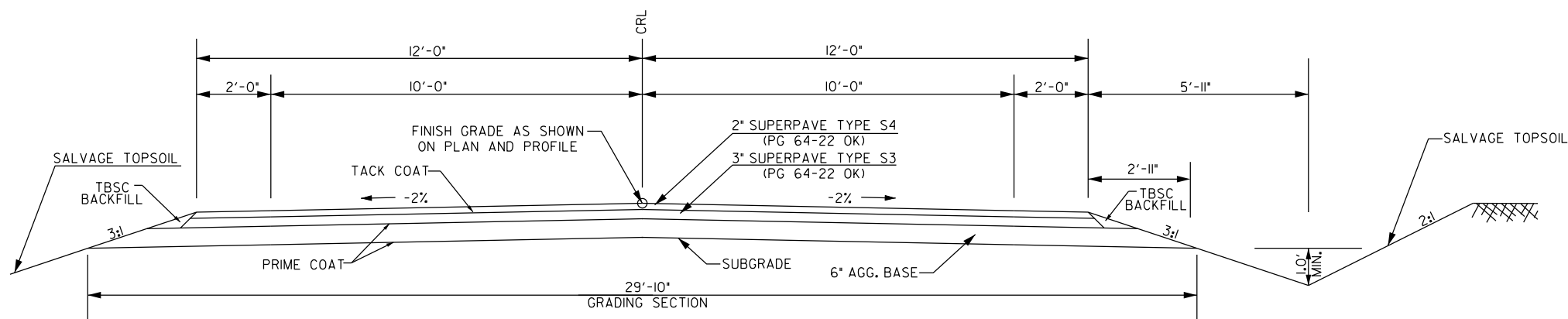
REGISTERED PROFESSIONAL ENGINEER

4-27-17

SUBMITTED BY JOHN R. WINTERS, P.E. 14040
 SOUTHEAST ARCADE ENGR. #3
 203 PEPSICO AVE
 HUGO, OK 74743
 PHONE: 580-326-9191

OKLAHOMA DEPARTMENT OF TRANSPORTATION	DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION
DATE APPROVED	DATE APPROVED
BY	BY
CHIEF ENGINEER	DIVISION ADMINISTRATOR
SWO	PROJECT NO. STP-239D(032)CI

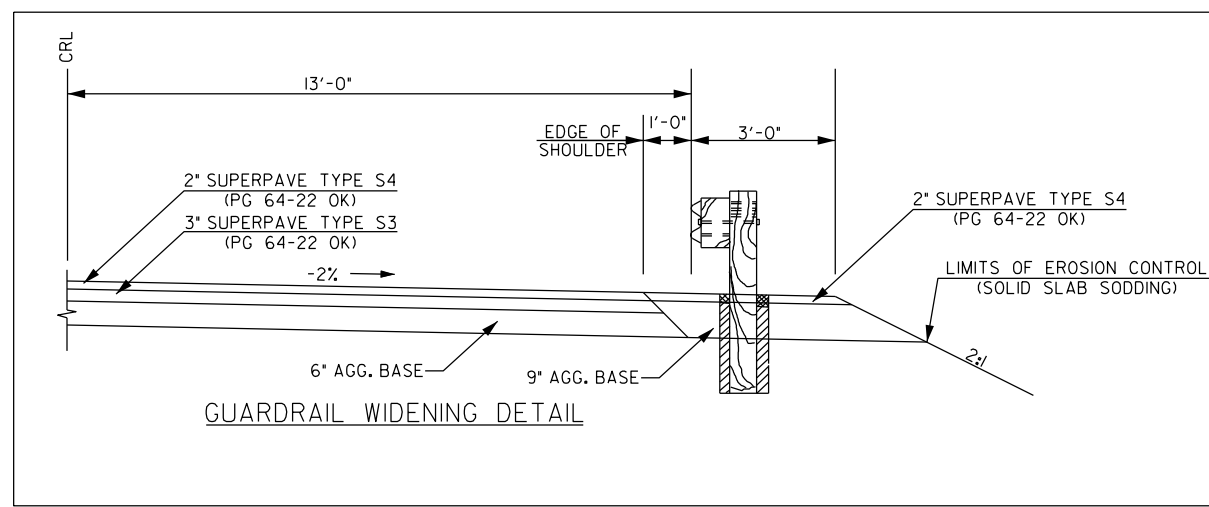
"2009 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION - ENGLISH GOVERN,
APPROVED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, JANUARY 4, 2010."



NOT TO SCALE
TYPICAL SECTION NO.1

CRL STATION 100+53.40 - 103+11.38
 CRL STATION 103+74.55 - 106+47.45

ALL COST ASSOCIATED WITH THE PLACEMENT OF THE TBSC SHALL BE INCLUDED IN PRICE BID FOR TBSC.



GENERAL BRIDGE NOTES:

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

THE 6" PERFORATED PIPE UNDERDRAIN ROUND AND THE 6" NON-PERFORATED PIPE UNDERDRAIN ROUND, AS SHOWN ON THE STANDARDS, SHALL NOT BE INSTALLED.

PLACE 2" VENT PIPE IN THE DECK SLAB BETWEEN EACH BEAM IN EACH SPAN. TOTAL 8.0 EACH VENTS. COST TO BE INCLUDED IN COST OF CLASS AA CONCRETE.

ABUTMENT PILING CAPACITY:

THE REQUIRED ULTIMATE PILE CAPACITY FOR HP 12X53 IS 67.20 TONS/PILE.

THE REQUIRED ULTIMATE PILE CAPACITY FOR HP 10X42 IS 67.20 TONS/PILE.

THE LENGTH OF STEEL PILING SHOWN ON THE PLANS IS FOR ESTIMATING PURPOSES ONLY.

ANCHOR BOLTS:

SIZING: THE MINIMUM REQUIREMENT FOR ANCHOR BOLT SIZE AND LENGTH (FIXED OR EXPANSION BEARING) IS 1/2" DIAMETER BOLT - SET 15" MINIMUM INTO CONCRETE.

BRIDGE PAY ITEM NOTES:

- (1) PAYMENT FOR PAY ITEMS WILL BE BASED ON PLAN QUANTITIES ACCORDING TO SECTION 109.01(b) OF THE STANDARD SPECIFICATIONS.
- (2) THE "REMOVAL OF EXISTING BRIDGE STRUCTURE" SHALL CONSIST OF THE REMOVAL AND DISPOSAL OF 3-9 CONCRETE SLAB SPAN BRIDGE. THE REMOVED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF BY HIM/HER IN A MANNER APPROVED BY THE ENGINEER
- (3) 18" RIPRAP ESTIMATED AT 120 LBS PER C.F.
- (4) INCLUDES REMOVAL OF THE EXISTING RETAINING WALL AND PIPE FENCE ON THE NORTHWEST CORNER OF THE BRIDGE.
- (5) CLSM BACKFILL SHALL BE USED IN PLACE OF THE GRANULAR BACKFILL AS SHOWN ON ODOT STANDARD
- (6) QUANTITY INCLUDES 27.50 CY TO PLACE THE CLSM AT A MINIMUM OF 1.0" THICK UNDER THE APPROACH SLAB.
- (7) THE FLOOR AND CURTAIN WALLS OF THE EXISTING STRUCTURE ARE TO REMAIN IN PLACE TO MINIMIZE SCOUR.
- (8) REMOVED MATERIAL IS TO BE PLACED IN THE SCOUR AREA ON THE NORTH SIDE OF THE BRIDGE AND TO BE GROUTED WITH CLASS "C" CONCRETE.
- (9) TO BE USED TO GROUT THE REMOVED EXISTING BRIDGE MATERIAL ON THE NORTH SIDE OF THE BRIDGE. ALL COST ASSOCIATED WITH THE GROUTING SHALL BE INCLUDED IN THE PRICE BID FOR CLASS C CONCRETE.

ENVIRONMENTAL MITIGATION NOTES

BAT SPECIES NOTE: THE NORTHERN LONG EARED BAT ARE MIGRATORY, INSECT EATING BATS PROTECTED BY THE ENDANGERED SPECIES ACT. THESE SPECIES CAN USE BRIDGES AS SUMMER ROOSTING SITES. IF THE BRIDGE REMOVAL OR MODIFICATIONS IS TO OCCUR BETWEEN APRIL 1 AND NOVEMBER 15, THE RESIDENT ENGINEER SHALL CONTACT THE ODOT BIOLOGIST AT 405-521-2515 TO CONDUCT A BAT SURVEY. THE SURVEY CAN BE CONDUCTED ONLY BETWEEN MAY 15 AND AUGUST 15. IF LISTED BAT SPECIES ARE DETECTED, THE ODOT BIOLOGICAL RESOURCES PROGRAM WILL CONSULT WITH US FISH AND WILDLIFE SERVICE. WORK ON THE BRIDGE WILL BE RESTRICTED AND MAY BE PROHIBITED FOR ALL OF PART OF THE DURATION OF THE BAT'S MATERNITY ROOSTING SEASON. ANY DELAY DUE TO THIS WILL NOT BE COMPENSATED.

AMERICAN BURYING BEETLE: 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.

RIPARIAN VEGETATION: THE REMOVAL OF TREES AND SHRUBS SHALL BE RESTRICTED TO AREAS WITHIN THE ACTUAL LIMITS OF CONSTRUCTION. TREES TO REMAIN IN PLACE SHALL BE FLAGGED WITH BRIGHT-COLORED FLAGS BY THE RESIDENT ENGINEER.

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 NIB NO. 07077 WAS NOT OBSERVED DURING THE INITIAL SURVEYS CONDUCTED AS PART OF THE BIOLOGICAL STUDIES IN JULY 2016. MIGRATORY BIRDS MAY OCCUPY THE BRIDGE IN THE FUTURE NESTING SEASONS. THE RESIDENT ENGINEER WILL EVALUATE THE CONTRACTOR'S PROPOSED WORK METHODS AND CONCLUDED 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.

29946(04) SUMMARY OF PAY QUANTITIES				
0200 BRIDGE TYPE II - 60' P.C. BEAM, 26'-0" CL RDWY, TR3-2				
ITEM NO.	DESCRIPTION		UNIT	QUANT.
501(B) 1307	SUBSTRUCTURE EXCAVATION COMMON		(1) CY	180.00
501(G) 6309	CLSM BACKFILL		(1)(5)(6) CY	93.50
503(A) 1311	PRESTRESSED CONCRETE BEAMS (TYPE II)		(1) LF	179.00
504(A) 1304	APPROACH SLAB		(1) SY	114.80
504(B) 1305	SAW-CUT GROOVING		(1) SY	239.96
504(D) 6239	CONCRETE RAIL (TR3)		(1) LF	176.00
506(A) 1322	STRUCTURAL STEEL		(1) LB.	1400.00
507(A) 6172	WEATHERING STEEL FIXED BEARING ASSEMBLY		(1) EA	3.00
507(B) 6176	WEATHERING STEEL EXPANSION BEARING ASSEMBLY		(1) EA	3.00
509(A) 1326	CLASS AA CONCRETE		(1) CY	48.50
509(B) 1328	CLASS A CONCRETE		(1) CY	60.40
509(D) 1331	CLASS C CONCRETE		(9) CY	20.00
511(A) 1332	REINFORCING STEEL		(1) LB.	20,160.00
514(A) 6010	PILES, FURNISHED (HP 10X42)		LF	106.96
514(A) 6011	PILES, FURNISHED (HP 12X53)		LF	234.64
514(B) 6292	PILES, DRIVEN (HP 10X42)		LF	106.96
514(B) 6294	PILES, DRIVEN (HP 12X53)		LF	234.64
514(L) 6220	PILE SPLICE, H-PILE (NON-BIDDABLE)		EA	1.00
601(B) 1353	TYPE I-A PLAIN RIPRAP		(3) TON	374.00
601(I) 6312	FILTER BLANKET (RIPRAP)		SY	461.00
619(D) 1397	REMOVAL OF EXISTING BRIDGE STRUCTURE		(1)(2)(4)(7)(8) LSUM	1.00

29946(04) PAY QUANTITIES				
0600 STAKING				
ITEM NO.	DESCRIPTION		UNIT	QUANT.
642(B) 0096	CONSTRUCTION STAKING LEVEL II		LSUM	1.00

SUMMARY OF GUARD RAIL

LOCATION	Lane		Anchor Units			Total Panel Length Including Anchor Units	Total Rail Between Anchor Units
	Lt.	Rt.	Type "D-BF"	Type "B"	GET EXTRUDER TERMINAL		
			Ea.	Ea.	Ea.		
102+00.05 TO 103+00.05	X		1		1	100	25
102+00.05 TO 103+00.05		X	1		1	100	25
103+85.88 TO 104+85.88	X		1		1	100	25
103+85.88 TO 104+85.88		X	1		1	100	25
Totals			4		4	400	100

EW-1470/SW-LIMESTONE RD. LATIMER COUNTY
SOUTHEAST #3 CIRCUIT ENGINEERING DISTRICT
 SUMMARY OF QUANTITIES
 BRIDGE
 STATE JOB NO. 29946(04) SHEET NO. ABO1

ROADWAY GENERAL CONSTRUCTION NOTES

EXISTING ROAD SHALL BE CLOSED TO THROUGH TRAFFIC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BARRICADES, CONSTRUCTION SIGNS, LIGHTS, ETC. ALL CONSTRUCTION SIGNING WILL BE DONE ACCORDING TO THE STANDARDS SET FORTH IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" CURRENT EDITION, AND AS SHOWN ON TCS STANDARD DRAWINGS.

RESPONSIBILITY OF THE COUNTY AND NOT A PART OF THIS CONTRACT:

1. FURNISH ALL RIGHT-OF-WAY
2. RELOCATE ALL UTILITIES
3. RELOCATE ALL FENCES

THE CONTRACTOR SHALL GIVE NOTICE TO THE COUNTY AND THE OKLAHOMA DEPARTMENT OF TRANSPORTATION (DIVISION 2) IN WRITING, FOURTEEN (14) CALENDAR DAYS BEFORE WORK BEGINS ON THE PROJECT.

CONTRACTOR SHALL CONFINE THE WORK TO WITHIN THE LIMITS OF RIGHT-OF-WAY. ANY DAMAGE CAUSED BY THE CONTRACTOR OUTSIDE THE LIMITS OF RIGHT-OF-WAY WILL BE REPAIRED OR RESTORED TO THE ORIGINAL CONDITION AT THE CONTRACTOR'S OWN EXPENSE TO THE SATISFACTION OF THE ENGINEER.

EROSION CONTROL NOTES:

AT THE BEGINNING OF THE TURFING OPERATIONS, ANY AREAS INCLUDED IN PLAN QUANTITIES THAT HAVE GROWN A SATISFACTORY VOLUNTEER TURF OR PERENNIAL GRASS, AS DETERMINED BY THE ENGINEER, SHALL NOT BE SEEDDED, SODDED OR SPRIGGED.

ROADWAY PAY QUANTITY NOTES

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

- (1) ITEM "EARTHWORK" SHALL CONSIST OF THE FOLLOWING:
- a. SEE GRADING ESTIMATE, THIS SHEET, FOR EARTHWORK QUANTITIES.
 - b. 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 SECTION AND THE REMAINDER ON COMPLETED FILL SLOPES OR OTHER PRIORITY AREAS LOCATED BY THE ENGINEER. ALL ADDITIONAL COSTS ASSOCIATED WITH OPERATION SHALL BE INCLUDED IN THE PAY ITEM FOR EARTHWORK, LUMP SUM. PRICE BID TO INCLUDE COST OF 0-46-0 FERTILIZER ESTIMATED AT 150 LBS PER ACRE ON WHICH TOPSOIL IS REPLACED.
 - c. ALL EMBANKMENT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 202 OF THE STANDARD SPECIFICATIONS.
 - d. EXISTING SURFACING TO BE SCARIFIED AND INCORPORATED INTO THE SUBGRADE IN A MANNER APPROVED BY THE ENGINEER.
 - e. THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGE TOPSOIL.
 - f. REMOVAL OF ANY EXISTING SIGNS WHICH ARE TO BE PLACED ON THE R/W IN AN USABLE MANNER AND TO BECOME THE PROPERTY OF THE COUNTY.
 - g. CHANNEL EXCAVATION
- (2) ESTIMATED QUANTITY FOR TEMPORARY EROSION AND SEDIMENT CONTROL TO BE USED IN A MANNER APPROVED BY THE ENGINEER. PRICE BID TO INCLUDE COST OF SILT REMOVAL, NECESSARY MAINTENANCE, MAINTAINING IN AN UPRIGHT POSITION, AND REMOVAL.
- (3) PRICE BID TO INCLUDE THE COST OF WATERING AND (10-20-10) FERTILIZER. WATERING ESTIMATED AT 40 GAL. PER SQ. YARD FOR ESTIMATING PURPOSES ONLY. CONTRACTOR WILL PROVIDE SUFFICIENT WATER TO PRODUCE ADEQUATE GRASS GROWTH AS APPROVED BY THE ENGINEER. FERTILIZER (10-20-10) ESTIMATED AT 200 LBS PER 1000 SQ. YARDS OF SODDING.
- (4) APPLICATION RATE SHALL BE 0.21 GAL/SY.
- (5) PRICE BID FOR "CLEARING AND GRUBBING" SHALL INCLUDE THE REMOVAL OF ALL EXISTING FENCES DESIGNATED FOR REMOVAL BY THE ENGINEER. ALL PERMANENT FENCES SHALL REMAIN IN PLACE.
- (6) THIS ITEM SHALL INCLUDE ALL TRAFFIC CONTROL DEVICES NECESSARY TO REGULATE ALL TRAFFIC DURING CONSTRUCTION. THIS ITEM SHALL BE PAID FOR AS A LUMP SUM DUE TO THE MINOR EXTENT OF CONSTRUCTION FOR THIS PROJECT. TRAFFIC CONTROL SHALL BE IN ACCORDANCE TO STATE STANDARDS AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", CURRENT EDITION. ALL CONSTRUCTION SIGNS OVER 10 S.F. SHALL BE DOUBLE POSTED.
- (7) APPLICATION RATE SHALL BE 0.10 GAL/SY. OF DILUTED EMULSION.
- (8) INCLUDES 71.0 TONS TO BE USED AS DIRECTED BY THE ENGINEER TO MINIMIZE EDGE DROP OFF.
- (9) QUANTITY SHOWN INCLUDES 1,388 L.F. TRAFFIC STRIPE (PAINT)(WHITE) AND 1,388 L.F. TRAFFIC STRIPE (PAINT)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF FOUR INCH (4") WIDE TRAFFIC STRIPE

29946(04) PAY QUANTITIES				
0100 ROADWAY				
ITEM NO.	DESCRIPTION	UNIT	QUANT.	
201(A)	0102 CLEARING AND GRUBBING	(5)	LSUM	1.00
202(H)	0185 EARTHWORK	(1)	LSUM	1.00
221(C)	2801 TEMPORARY SILT FENCE	(2)	LF	1,062.00
221(F)	0100 TEMPORARY SILT DIKE	(2)	LF	48.00
230(A)	2806 SOLID SLAB SODDING	(3)	SY	728.90
303(A)	2100 AGGREGATE BASE TYPE A		CY	330.30
402(E)	0225 TRAFFIC BOUND SURFACE COURSE TYPE E	(8)	TON	100.00
407(B)	0250 TACK COAT	(7)	GAL	176.50
408	5774 PRIME COAT	(4)	GAL	741.10
411(B)	5945 SUPERPAVE, TYPE S3(PG 64-22 OK)	(R-32)	TON	296.50
411(C)	5960 SUPERPAVE, TYPE S4(PG 64-22 OK)	(R-32)	TON	197.70
623(A)	0932 BEAM GUARDRAIL W-BEAM SINGLE		LF	100.00
623(F)	5686 GUARDRAIL ANCHOR UNIT (TYPE D-BF)		EA	4.00
623(G)	8571 GUARDRAIL END TREATMENT (GET)		EA	4.00

29946(04) PAY QUANTITIES				
0640 CONSTRUCTION				
ITEM NO.	DESCRIPTION	UNIT	QUANT.	
641	1399 MOBILIZATION		LSUM	1.00

29946(04) SUMMARY OF PAY QUANTITIES				
0300 TRAFFIC CONTROL				
ITEM NO.	DESCRIPTION	UNIT	QUANT.	
854(A)	8800 TRAFFIC STRIPE (PAINT)(4" WIDE)	(9)	LF	2,776.20
880(J)	8905 CONSTRUCTION TRAFFIC CONTROL	(6)	LSUM	1.00

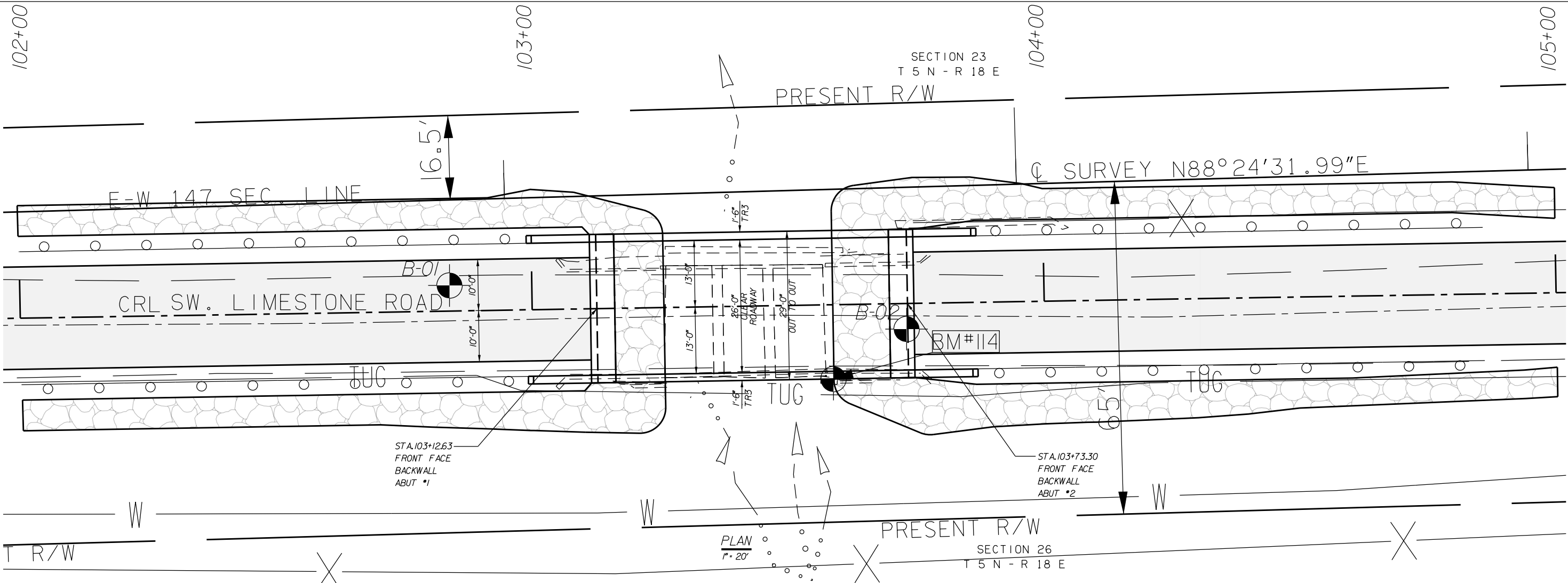
GRADING ESTIMATE - C.Y.				
LOCATION	EXC.	EMB.+15%	BORROW	NET
MAINLINE	495.50	390.90	0.00	104.60
CHANNEL	563.60	0.00	0.00	563.60
TOTALS	1059.10	390.90	0.00	668.20

NOTE:
EXCESS MATERIAL TO BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF BY HIM/HER IN A MANNER APPROVED BY THE ENGINEER.



SUMMARY OF SURFACING						
STATION	T.B.S.C. TYPE E	TACK COAT	PRIME COAT	AGG. BASE	SUPERPAVE TYPE S4 (PG 64-22OK)	SUPERPAVE TYPE S3 (PG 64-22OK)
	TON.	GAL.	GAL.	CY	TON.	TON.
100+03.4 TO 100+53.40	2.46	13.43	56.40	26.23	15.04	22.56
100+53.40 TO 103+11.38	12.69	79.50	333.92	148.12	89.04	133.57
103+74.55 TO 10647.45	13.43	83.51	350.75	155.95	93.53	140.30
106+47.45 TO 106+97.45	2.46	13.43	56.40	26.23	15.04	22.56
TOTAL	28.58	176.44	741.06	330.30	197.62	296.42

EW-1470/SW-LIMESTONE RD. LATIMER COUNTY
SOUTHEAST #3 CIRCUIT ENGINEERING DISTRICT
 SUMMARY OF QUANTITIES ROADWAY
 STATE JOB NO. 29946(04) SHEET NO. A01



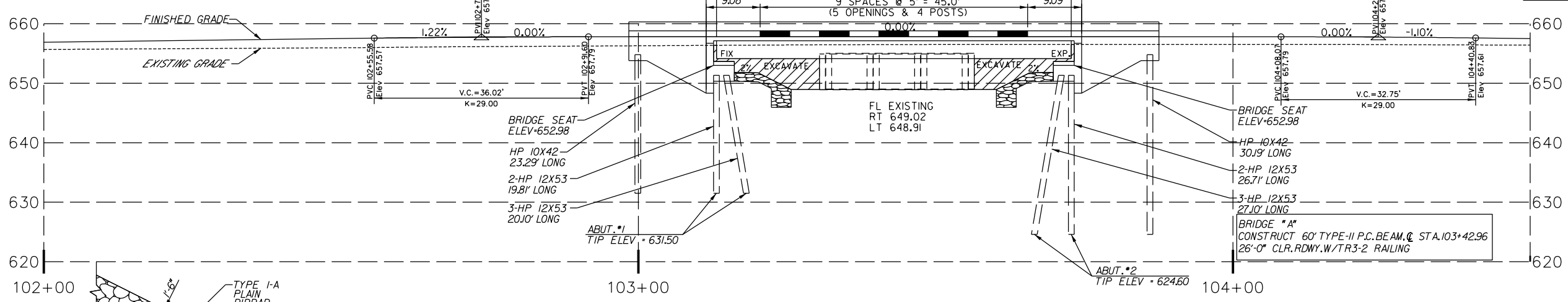
BM#3 @ END CONC. NW CORNER CATTLE GUARD
 X= 2752916.2542
 Y= 5743715136
 ELEV.= 657.76
 CRL STATION 98+87.84
 69.33' RT

BM#114 TOP REBAR IN CONC. SE CORNER BRIDGE
 X= 2753386.6256
 Y= 57446810150
 ELEV.= 654.90
 CRL STA 103+59.19
 14.56' RT

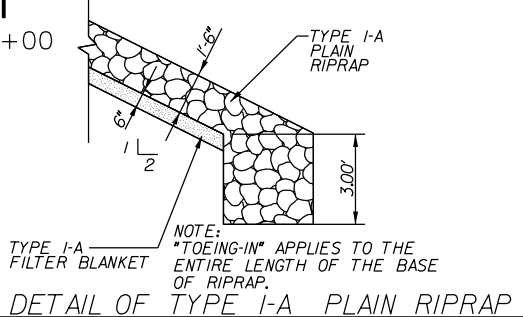
BM#4 TOP CONC S-SIDE CORNER POST
 X= 2753588.4233
 Y= 57446810150
 ELEV.= 658.03
 CRL STA 105+61.52
 16.02' LT

BM#97 TOP CAP STEEL BRACE P. W-BRACE POST
 X= 2753965.9175
 Y= 5744215148
 ELEV.= 663.07
 CRL STA 109+38.19
 36.73' RT

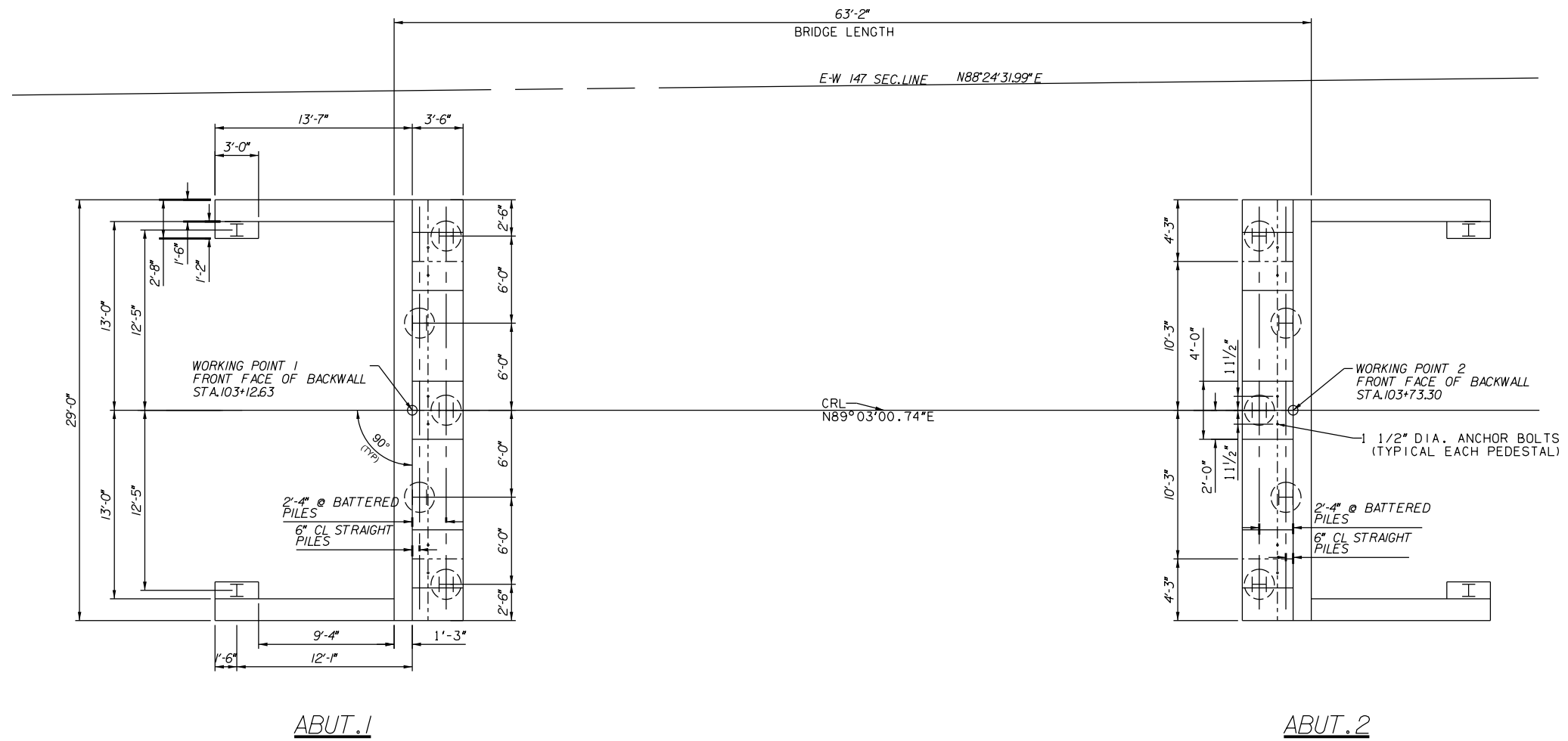
BM#1 TOP IRON PIN W-BRACE POST
 X= 2754685.8192
 Y= 5745052777
 ELEV.= 703.65
 CRL STA 116+59.44
 35.08' LT



HYDRAULIC DATA	
ROADWAY OT ELEV.	• 477 SQ.MI.
Q25	• 4621.2 CFS
V25	• 19.7 FPS
Q25 CHW	• 654.07 FT
Q50	• 5428.3 CFS
V50	• 20.7 FPS
Q50 CHW	• 654.56 FT
Q100	• 6578.2 CFS
V100	• 22.0 FPS
Q100 CHW	• 655.0 FT
QOT	• 7982.4 CFS
VOT	• 23.3 FPS
O.T.ELEV.	• 655.91 FT



EW-1470/SW-LIMESTONE RD. LATIMER COUNTY
SOUTHEAST #3 CIRCUIT ENGINEERING DISTRICT
GENERAL PLAN AND ELEVATION
 TYPE-II 60' P.C. BEAM, & STA. 103+42.96
 26'-0" CLR. RDWY. W/ TR3-2 RAILING
 STATE JOB NO. 29946(04) SHEET NO. B01

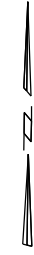


29946(04)

SUMMARY OF PAY QUANTITIES

0200 BRIDGE TYPE II-60' P.C. BEAM, 26'-0" CL RDWY, TR3-2

ITEM NO.	DESCRIPTION	UNIT	ABUT 1	ABUT 2	SUPERSTR	WINGS	TOTAL
501(B) 1307	SUBSTRUCTURE EXCAVATION COMMON	CY	60.00	60.00		60.00	180.00
501(G) 6309	CLSM BACKFILL	CY	46.75	46.75			93.50
503(A) 1311	PRESTRESSED CONCRETE BEAMS (TYPE II)	LF			179.00		179.00
504(A) 1304	APPROACH SLAB	SY	57.40	57.40			114.80
504(B) 1305	SAW-CUT GROOVING	SY	43.98	43.98	152.00		239.96
504(D) 6239	CONCRETE RAIL (TR3)	LF			126.40	49.60	176.00
506(A) 1322	STRUCTURAL STEEL	LB.	450.00	450.00	500.00		1400.00
507(A) 6172	WEATHERING STEEL FIXED BEARING ASSEMBLY	EA	3.00				3.00
507(B) 6176	WEATHERING STEEL EXPANSION BEARING ASSEMBLY	EA		3.00			3.00
509(A) 1326	CLASS AA CONCRETE	CY			48.50		48.50
509(B) 1328	CLASS A CONCRETE	CY	21.40	21.40		17.60	60.40
509(D) 1331	CLASS C CONCRETE	CY			20.00		20.00
511(A) 1332	REINFORCING STEEL	LB.	2,740.00	2740.00	11680.00	3000.00	20160.00
514(A) 6010	PILES, FURNISHED (HP 10X42)	LF				106.96	106.96
514(A) 6011	PILES, FURNISHED (HP 12X53)	LF	99.92	134.72			234.64
514(B) 6292	PILES, DRIVEN (HP 10X42)	LF				106.96	106.96
514(B) 6294	PILES, DRIVEN (HP 12X53)	LF	99.92	134.72			234.64
514(L) 6220	PILE SPLICE, H-PILE (NON-BIDDABLE)	EA					1.00
601(B) 1353	TYPE I-A PLAIN RIPRAP	TON	171.00	203.00			374.00
601(I) 6312	FILTER BLANKET (RIPRAP)	SY	211.00	250.00			461.00
619(D) 1397	REMOVAL OF EXISTING BRIDGE STRUCTURE	LSUM					1.00



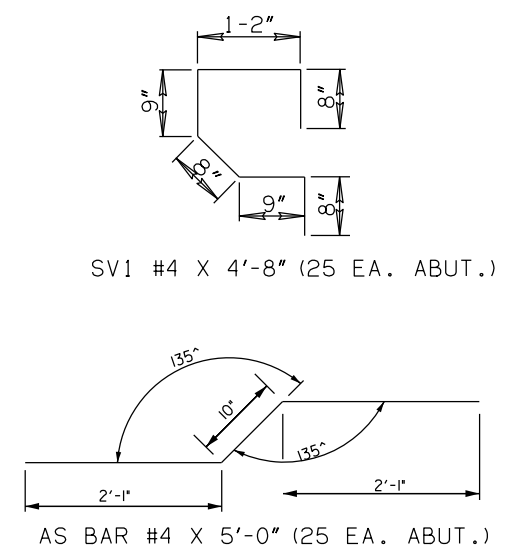
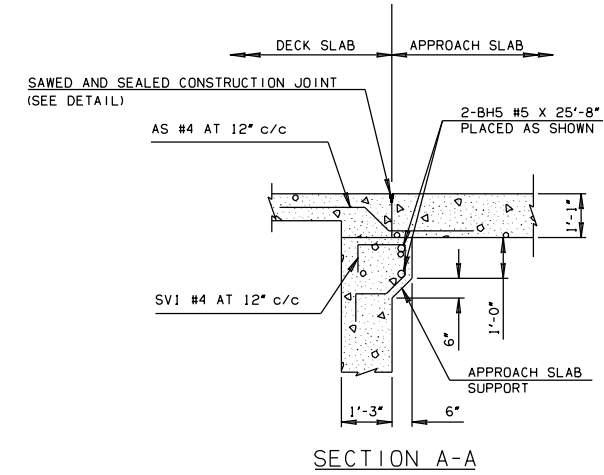
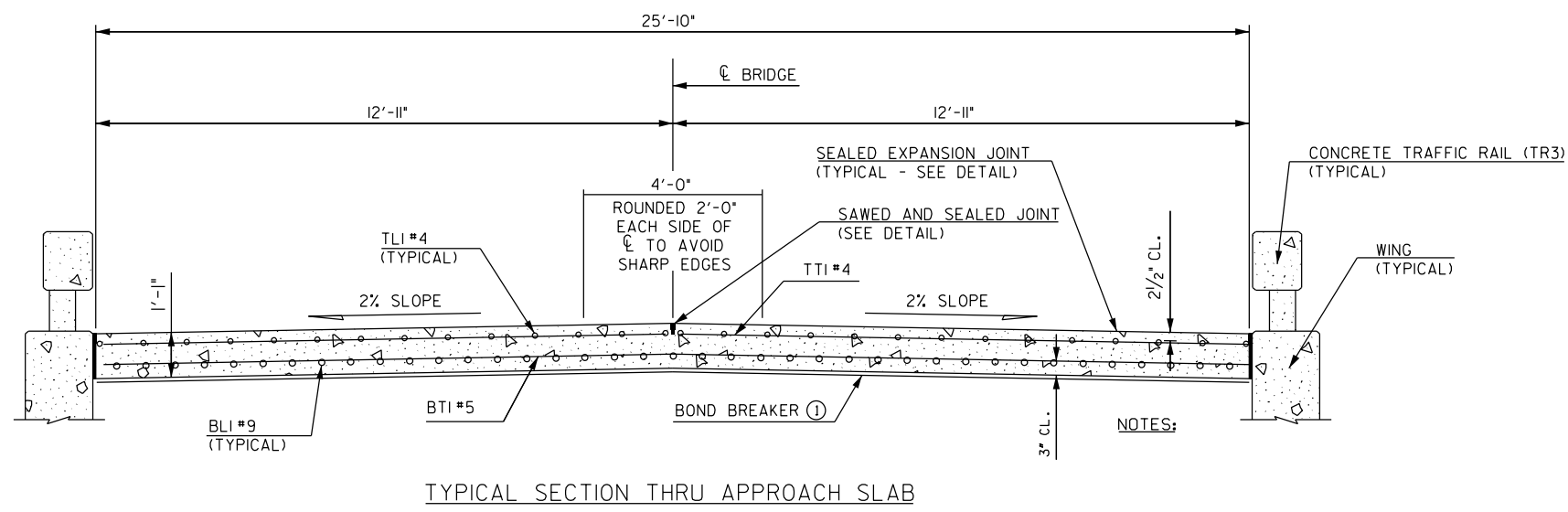
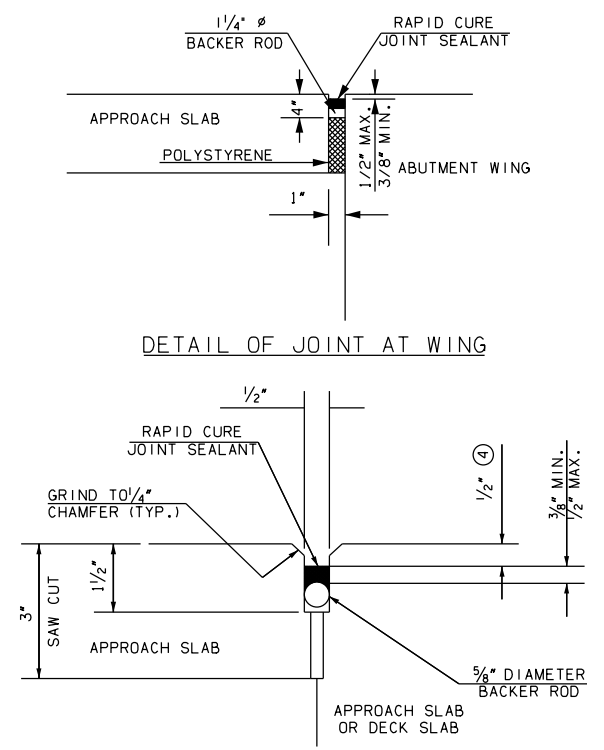
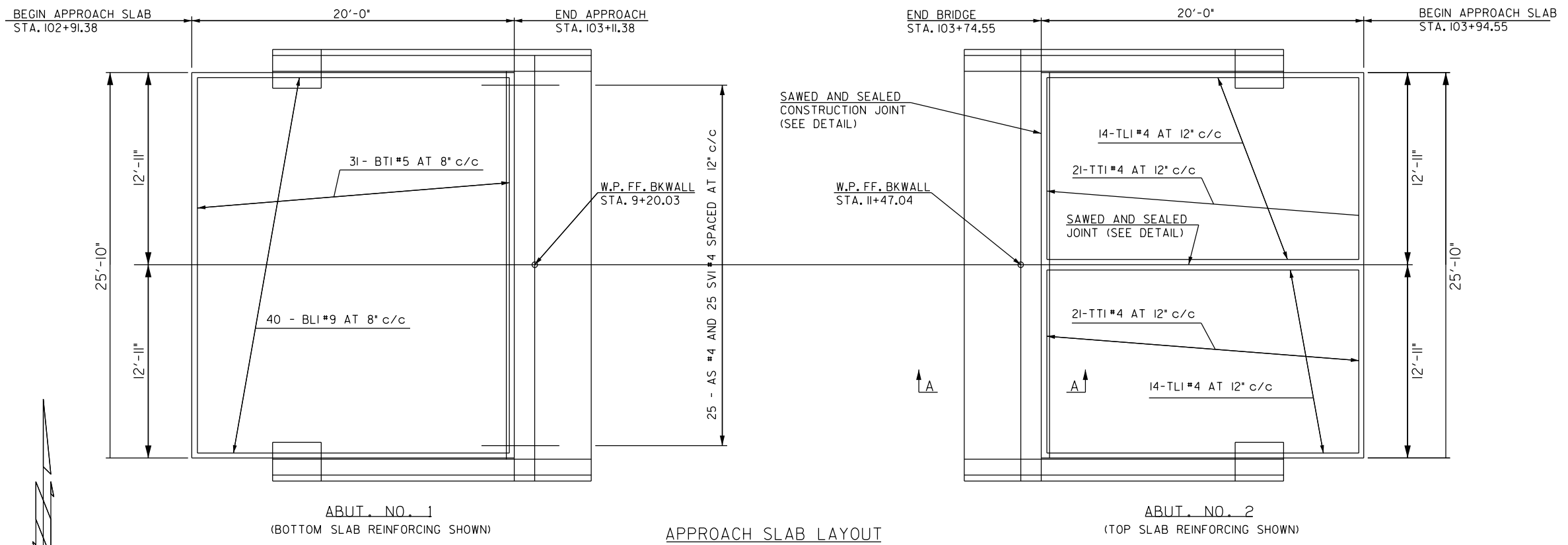
EW-1470/SW-LIMESTONE RD. LATIMER COUNTY

SOUTHEAST #3 CIRCUIT ENGINEERING DISTRICT

STAKING LAYOUT

STATE JOB NO. 29946(04) SHEET NO. 8002

DESCRIPTION	REVISIONS	DATE



MARK	NO.	SIZE	SHAPE	LENGTH
AS	25	#4	BNT.	5'-0"
BH5	2	#5	STR.	25'-8"
BL1	40	#9	STR.	19'-8"
BT1	31	#5	STR.	25'-6"
SV1	25	#4	BNT.	4'-8"
TL1	28	#4	STR.	19'-8"
TT1	42	#4	STR.	12'-7"

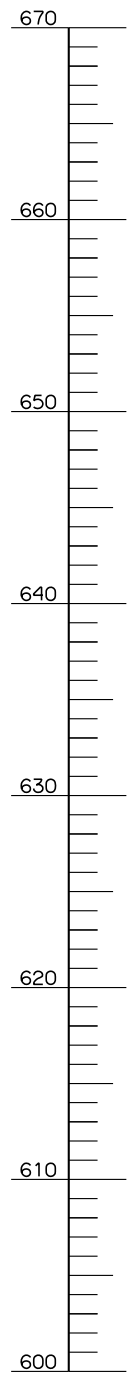
DESCRIPTION	UNITS	QUANTITY
⑤ APPROACH SLAB	SY	57.40
⑥ SAW-CUT GROOVING	SY	43.98

- ① THE BOND BREAKER SHALL BE ONE 6 MIL. OR TWO 4 MIL. POLYETHYLENE SHEETS. THE BOND BREAKER SHALL EXTEND THE FULL WIDTH AND LENGTH OF THE APPROACH SLAB BUT SHALL NOT BE PLACED ABOVE THE APPROACH SLAB SUPPORT AS SHOWN IN SECTION A-A.
- ② AS BARS SHALL BE TIED TO THE TOP LAYER OF REINFORCING STEEL IN THE DECK SLAB AND TO THE BOTTOM LAYER OF REINFORCING STEEL IN THE APPROACH SLAB. AS BARS SHALL BE INSTALLED BEFORE PLACING DECK SLAB CONCRETE. AS BARS ARE INCLUDED IN THE SUPERSTRUCTURE REINFORCING STEEL QUANTITIES.
- ③ THE APPROACH SLAB SUPPORT AT THE BACK FACE OF THE ABUTMENT BACKWALL SHALL BE CONSTRUCTED WITH THE ABUTMENT BACKWALL. SV1 AND BH5 BARS SHALL BE INSTALLED BEFORE PLACING THE ABUTMENT BACKWALL CONCRETE. SV1 AND BH5 BARS ARE INCLUDED IN THE ABUTMENT REINFORCING STEEL QUANTITIES. CONCRETE FOR THE APPROACH SLAB SUPPORT IS INCLUDED IN THE ABUTMENT CLASS A CONCRETE QUANTITIES.
- ④ AT TRANSVERSE JOINTS ONLY, THIS DIMENSION SHALL TAPER FROM 1/2" AT THE EDGE OF DRIVING LANES TO 5/8" AT TRAFFIC RAILS.
- ⑤ QUANTITIES FOR SAW-CUT GROOVING WILL BE IN ACCORDANCE WITH SECTION 504.04.G(1) OF THE STANDARD SPECIFICATIONS.
- ⑥ THE UNIT PRICE BID PER SQUARE YARD OF "APPROACH SLAB" SHALL INCLUDE ALL COST TO CONSTRUCT THE APPROACH SLAB INCLUDING THE COST OF ALL CONCRETE, ALL REINFORCING STEEL, BACKER ROD, RAPID CURE JOINT SEALANT, POLYSTYRENE, PREFORMED EXPANSION MATERIAL, POLYETHYLENE SHEETING, SAWING, GRINDING, CONCRETE BLOCK EXCAVATION, BACKFILL, MATERIALS, LABOR, EQUIPMENT, AND INCIDENTALS.

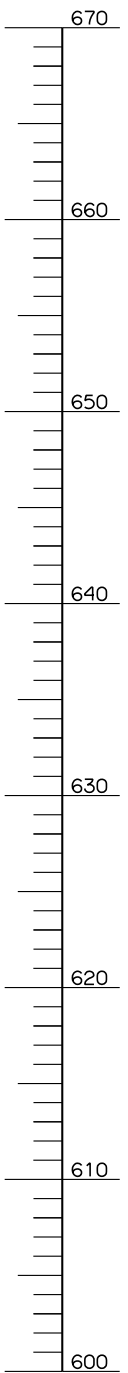
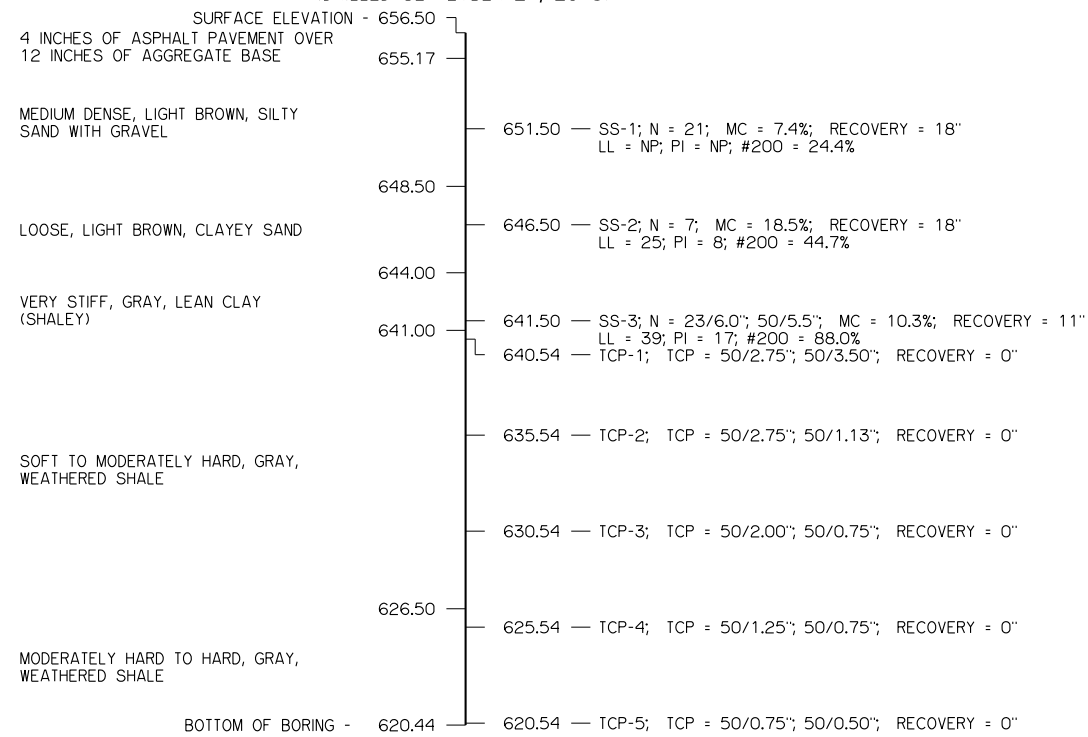
NOTE: BAR LIST FOR INFORMATION ONLY. REINFORCING TO BE INCLUDED IN THE PRICE BID PER SQUARE YARD OF "APPROACH SLAB".

SOUTHEAST #3 CIRCUIT ENGINEERING DISTRICT
LATIMER COUNTY

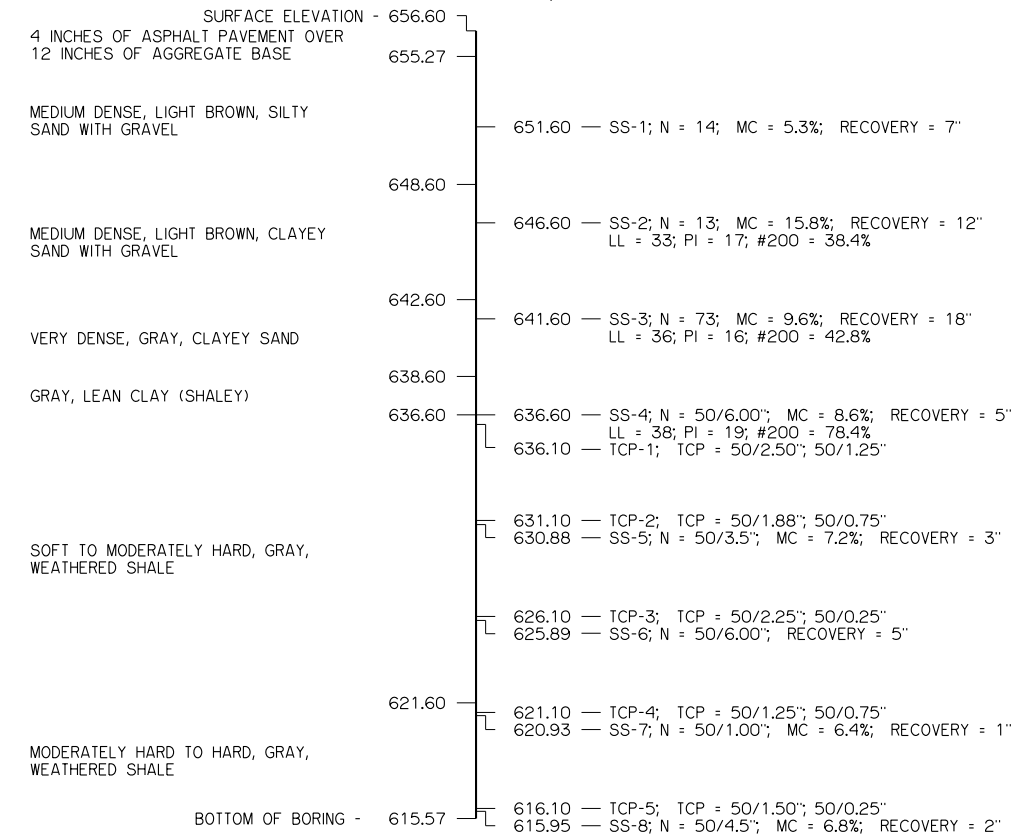
DETAILS OF APPROACH SLAB



BORING NO. B-01
 STATION 3+88.8, 16.7' RIGHT OF CL. SURVEY
 (DRILLED SEPTEMBER 21, 2015)



BORING NO. B-02
 STATION 4+77.8, 27.7' RIGHT OF CL. SURVEY
 (DRILLED SEPTEMBER 21, 2015)



SEISMIC CLASS AND SPECTRAL RESPONSE ACCELERATIONS

SITE CLASS	"C"
SEISMIC CATEGORY	A
A _s	0.063g
S _{0s}	0.140g
S ₀₁	0.076g

NOTE: FOR MORE INFORMATION ON THIS TABLE, SEE SECTION 4.3 OF THE GEOTECHNICAL REPORT

SITE GEOLOGY

FOR THE SITE GEOLOGY, SEE SECTION 4.1 OF THE GEOTECHNICAL REPORT.

LEGEND

- | | |
|-----------------------------------|--|
| SS = SPLIT SPOON SAMPLER | DCD = DIAMOND CORE BARREL DRILLING |
| N = NUMBER OF BLOWS PER 12 INCHES | UCS = UNCONFINED COMPRESSIVE STRENGTH |
| MC = MOISTURE CONTENT | DD = DRY DENSITY |
| LL = LIQUID LIMIT | ROD = ROCK QUALITY DESIGNATION |
| PI = PLASTICITY INDEX | ▽ = WATER LEVEL WHILE DRILLING OR SAMPLING |
| #200 = PERCENT PASSING #200 SIEVE | ▽ = WATER LEVEL AFTER DRILLING |
| TCP = TEXAS CONE PENETROMETER | ▽ = WATER LEVEL 24 HOURS AFTER DRILLING |

NOTE: WATER LEVEL ELEVATIONS SHOWN WERE OBTAINED AT THE TIME THE BORINGS WERE DRILLED AND MAY FLUCTUATE THROUGHOUT THE YEAR.

TO OBTAIN THE COMPLETE GEOTECHNICAL REPORT CONTACT THE BRIDGE DIVISION OF THE OKLAHOMA DEPARTMENT OF TRANSPORTATION AT (405) 521-2606

S.W. LIMESTONE RD. OVER TRIB. TO GAINES CREEK LATIMER COUNTY

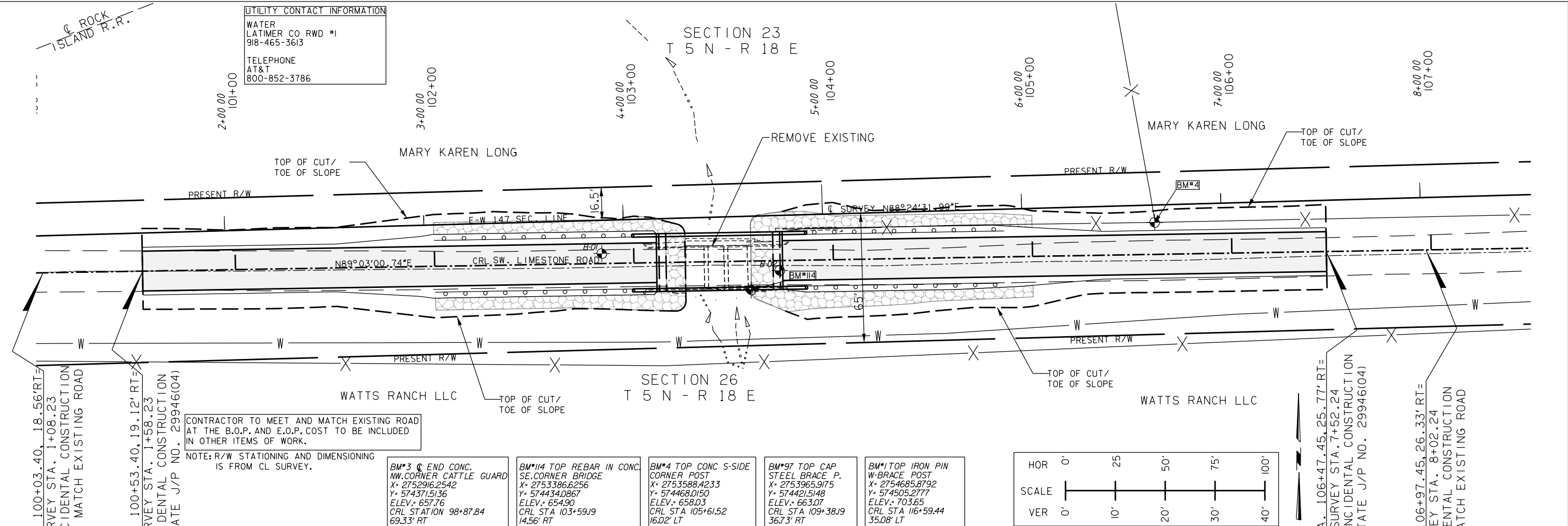
**FOUNDATION BORING LOGS
 (SHEET NO. 1 OF 1)**

ROCK ISLAND R.R.

UTILITY CONTACT INFORMATION
 WATER
 LATIMER CO RWD #1
 918-465-3613
 TELEPHONE
 AT&T
 800-852-3786

SECTION 23
 T 5 N - R 18 E

SECTION 26
 T 5 N - R 18 E



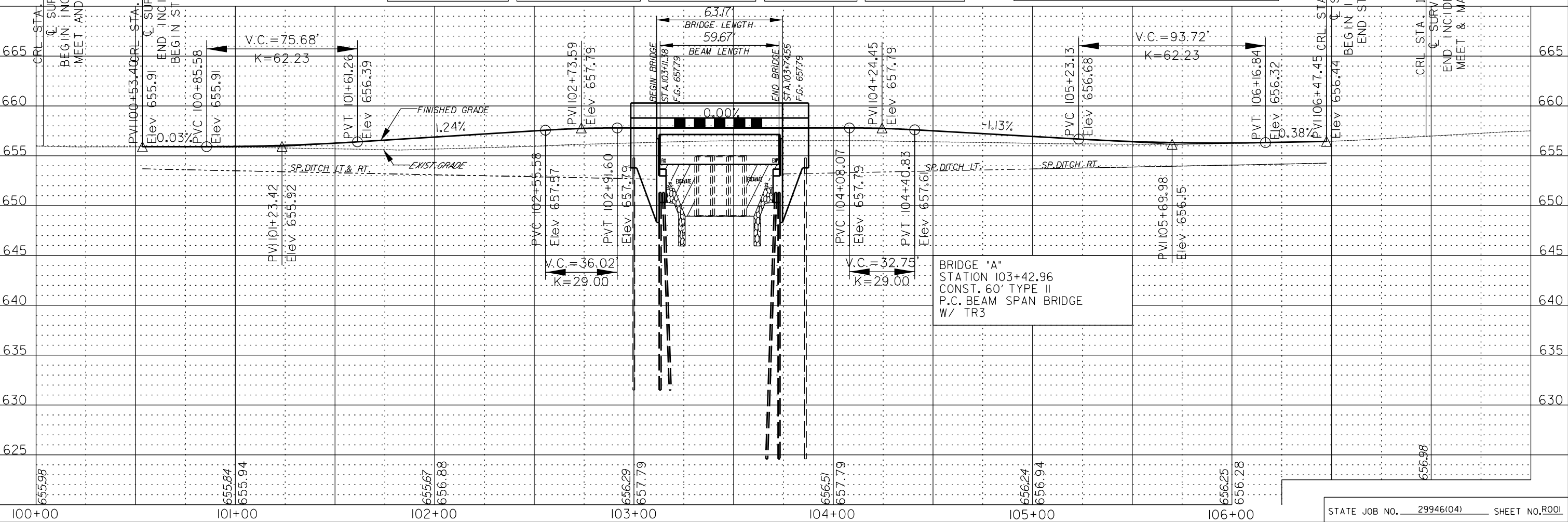
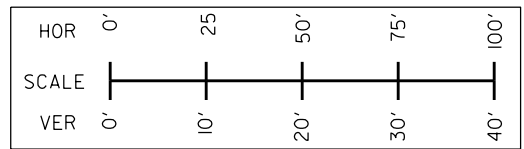
BM*3 @ END CONC. NW CORNER CATTLE GUARD
 X= 2752916.2542
 Y= 5743715136
 ELEV.= 657.76
 CRL STATION 98+87.84
 69.33' RT

BM*14 TOP REBAR IN CONC. SE CORNER BRIDGE
 X= 2753386.6256
 Y= 574434.0867
 ELEV.= 654.90
 CRL STA 103+59.9
 14.56' RT

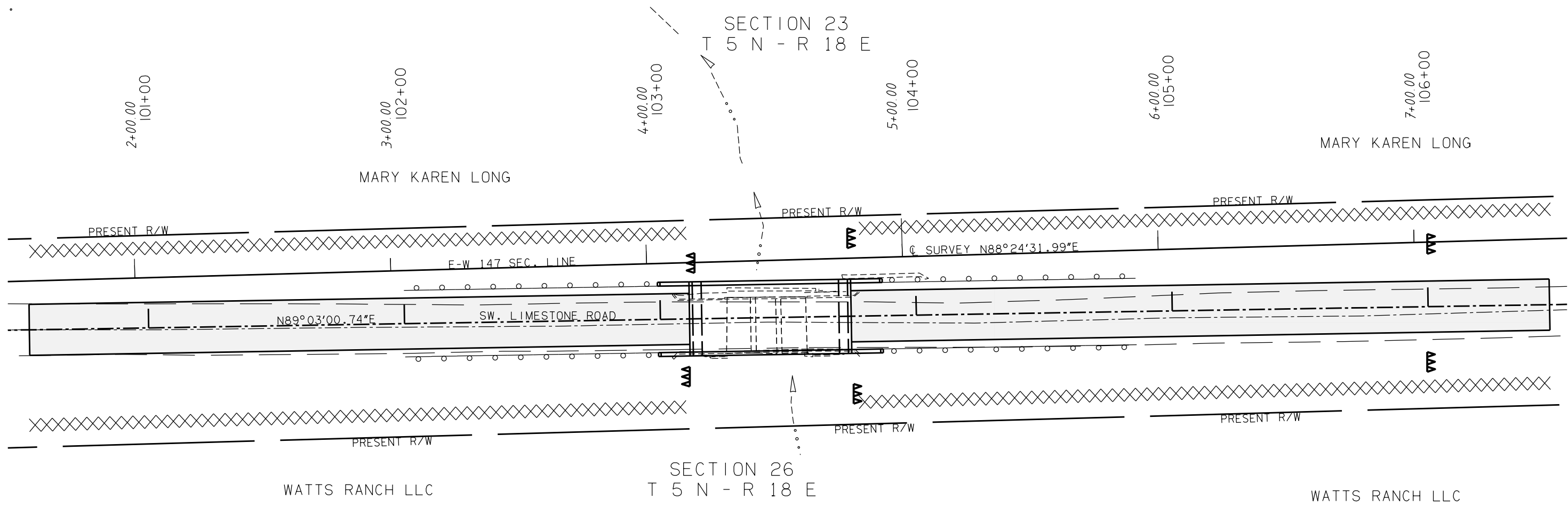
BM*4 TOP CONC S-SIDE CORNER POST
 X= 2753588.4233
 Y= 574468.0150
 ELEV.= 658.03
 CRL STA 105+61.52
 16.02' LT

BM*97 TOP CAP STEEL BRACE P.
 X= 2753965.9175
 Y= 574421.5148
 ELEV.= 663.07
 CRL STA 109+38.9
 36.73' RT

BM*1 TOP IRON PIN W-BRACE POST
 X= 2754685.8792
 Y= 574505.2777
 ELEV.= 703.65
 CRL STA 116+59.44
 35.08' LT



STATE JOB NO. 29946(04) SHEET NO. R001



SECTION 23
T 5 N - R 18 E

SECTION 26
T 5 N - R 18 E

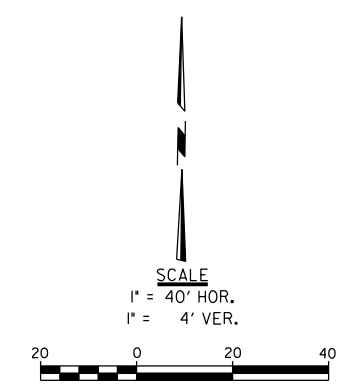
MARY KAREN LONG

MARY KAREN LONG

WATTS RANCH LLC

WATTS RANCH LLC

LEGEND	
AAA	SILT DIKE
XXXXXX	SILT FENCE



EW-1470/SW-LIMESTONE RD. LATIMER COUNTY
SOUTHEAST #3 CIRCUIT ENGINEERING DISTRICT
 EROSION CONTROL
 STATE JOB NO. 29946(04) SHEET NO. R002

Project: LIMESTONE CREEK

NAME	NORTHING	EASTING	ELEVATION
1	574505.27770000	2754685.87920000	703.65080000
2	574434.04496101	2753386.68279554	654.90093614
3	574371.51358983	2752916.25415926	657.75562983
4	574468.01499895	2753588.42329355	658.03246321
5	574421.51480000	2753965.91750000	663.06730000
25	574458.29550000	2752921.94350000	655.07970000
26	574605.27480000	2758213.28200000	682.35490000
28	571819.67520000	2752997.78160000	703.33740000
29	569181.02200000	2753073.76470000	690.91300000
30	569197.87490000	2753059.62340000	690.91300000
31	569191.77950000	2753134.77350000	690.91300000
32	569117.85230000	2753088.77560000	695.72130000
33	574665.52110000	2753280.70630000	664.30680000
34	574684.87140000	2753359.65000000	665.30330000
37	574656.85480000	2753287.81510000	665.25280000
40	574586.50480000	2753107.59470000	665.08990000
43	574499.91990000	2752885.40190000	665.18460000
97	574421.51480000	2753965.91750000	663.06730000
98	574495.04032500	2754244.77812500	661.89850000
99	574474.78913814	2752921.48535063	655.07970000
100	574511.53396314	2754244.31997563	661.89850000
101	574393.32056187	2752923.74833084	655.07970000
102	574430.06538687	2754246.58295584	661.89850000
114	574434.08669885	2753386.62558123	654.90225934
40*1	574434.04500000	2753386.68280000	654.90090000

1-BM/CP
TOP IRON PIN
W-BRACE POST
X= 2754685.8792
Y= 574505.2777
ELEV.= 703.65

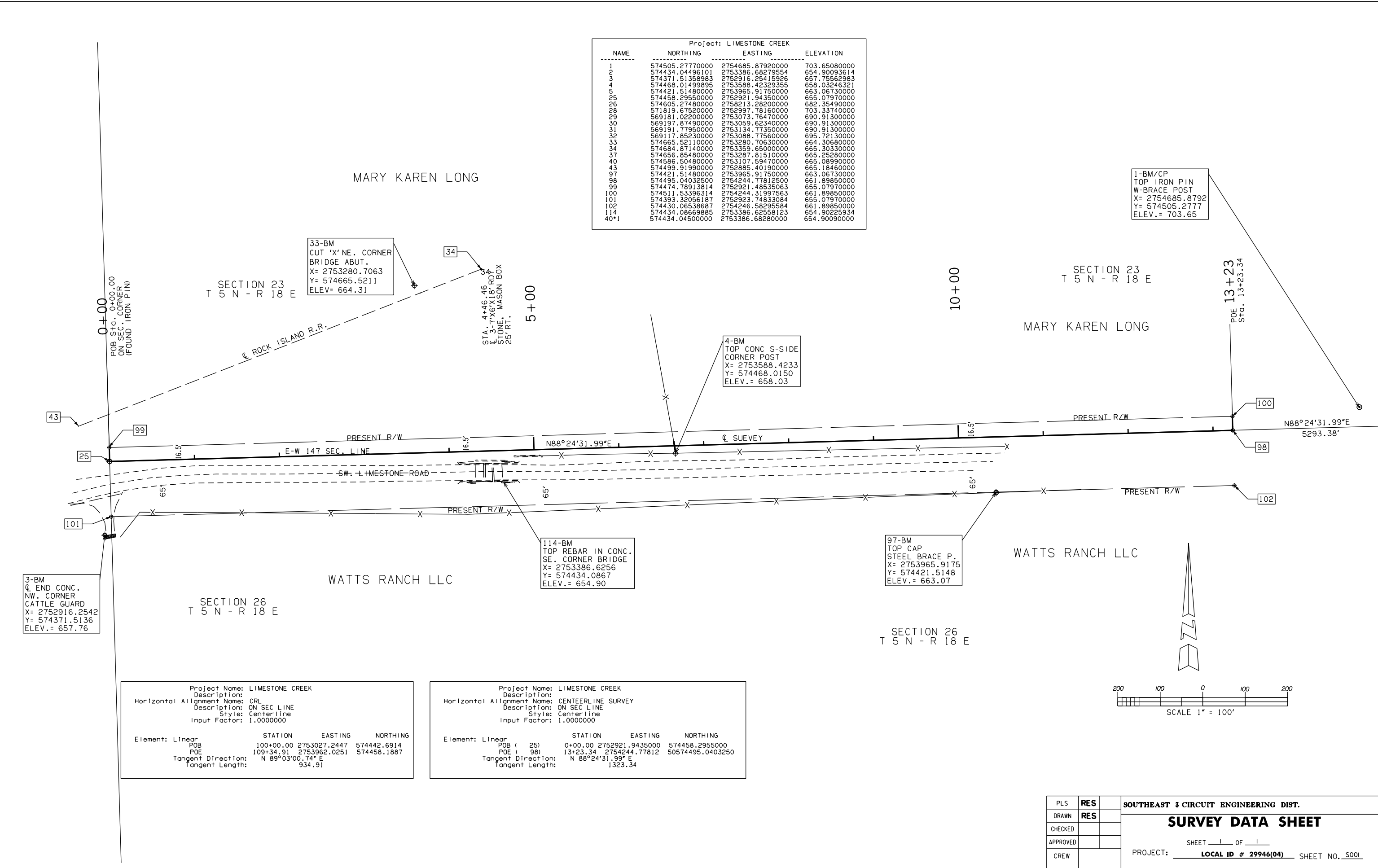
33-BM
CUT 'X' NE. CORNER
BRIDGE ABUT.
X= 2753280.7063
Y= 574665.5211
ELEV.= 664.31

4-BM
TOP CONC S-SIDE
CORNER POST
X= 2753588.4233
Y= 574468.0150
ELEV.= 658.03

114-BM
TOP REBAR IN CONC.
SE. CORNER BRIDGE
X= 2753386.6256
Y= 574434.0867
ELEV.= 654.90

97-BM
TOP CAP
STEEL BRACE P.
X= 2753965.9175
Y= 574421.5148
ELEV.= 663.07

3-BM
END CONC.
NW. CORNER
CATTLE GUARD
X= 2752916.2542
Y= 574371.5136
ELEV.= 657.76



Project Name: LIMESTONE CREEK
Description:
Horizontal Alignment Name: CRL
Description: ON SEC LINE
Style: Centerline
Input Factor: 1.000000

Element:	Line	STATION	EASTING	NORTHING
POB		100+00.00	2753027.2447	574442.6914
POE		109+34.91	2753962.0251	574458.1887
Tangent Direction:			N 89°03'00.74" E	
Tangent Length:			934.91	

Project Name: LIMESTONE CREEK
Description:
Horizontal Alignment Name: CENTERLINE SURVEY
Description: ON SEC LINE
Style: Centerline
Input Factor: 1.000000

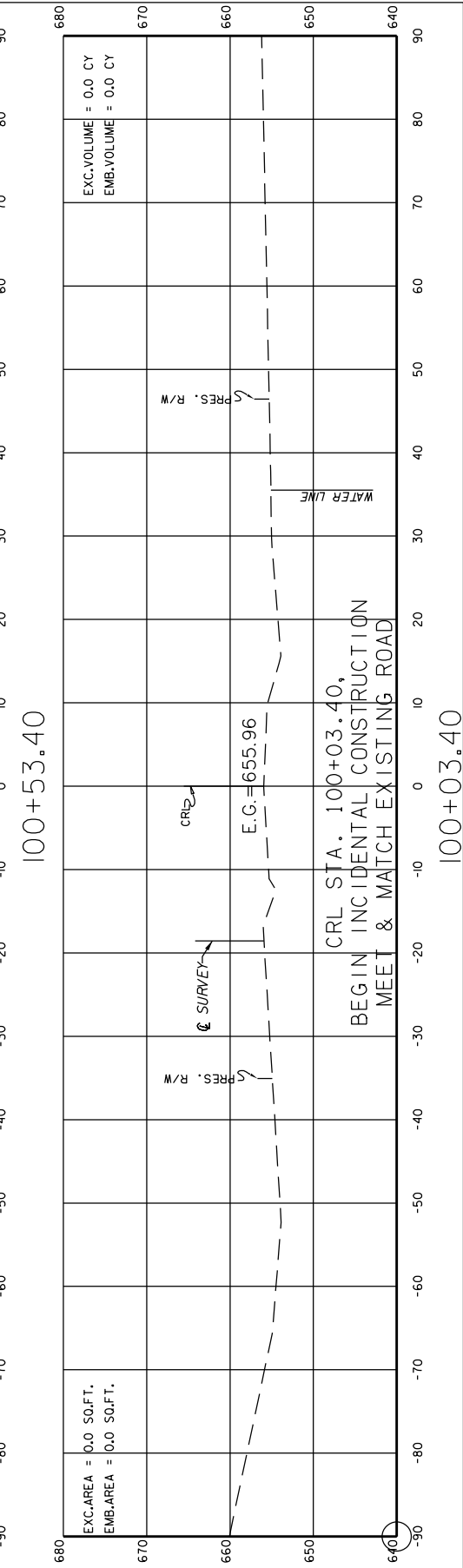
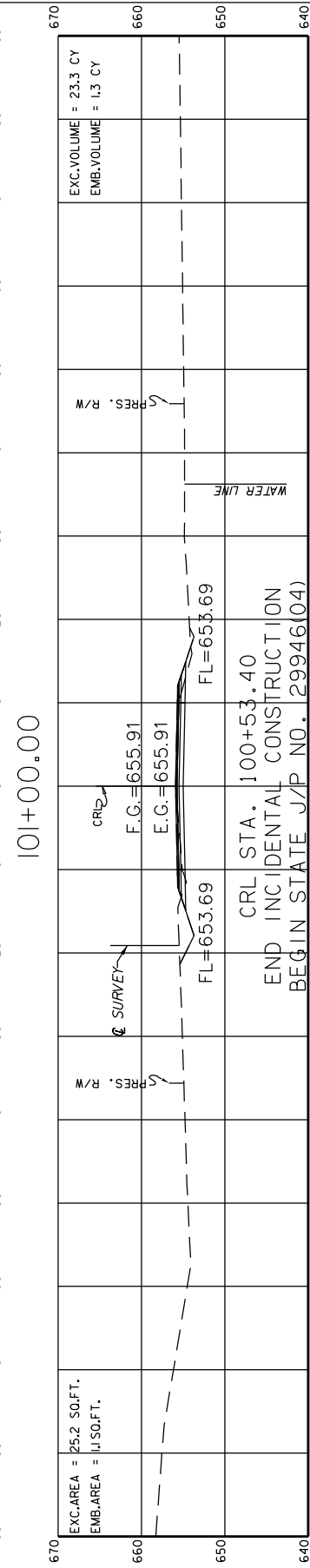
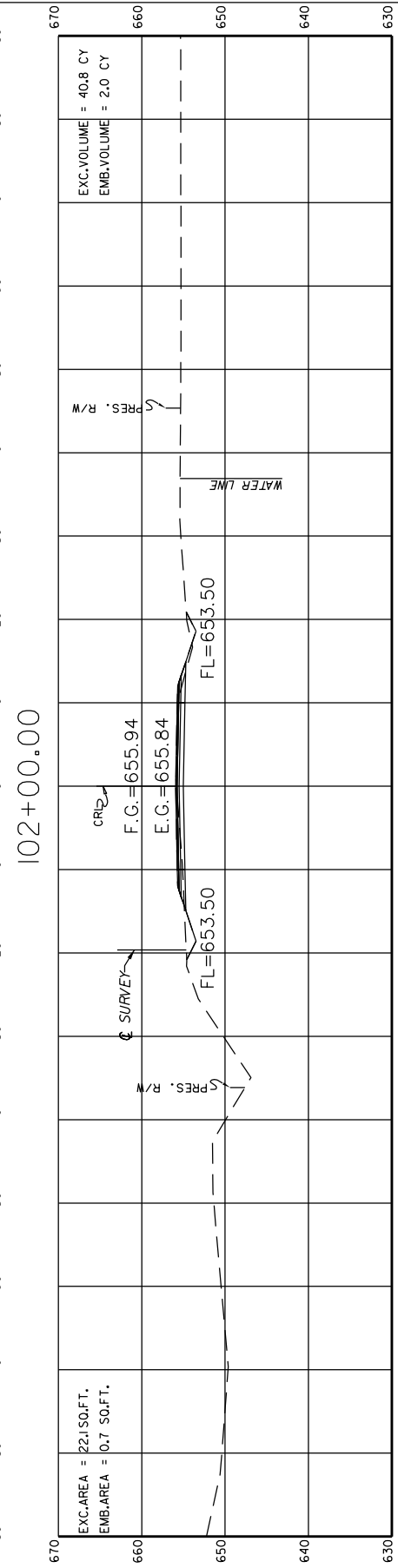
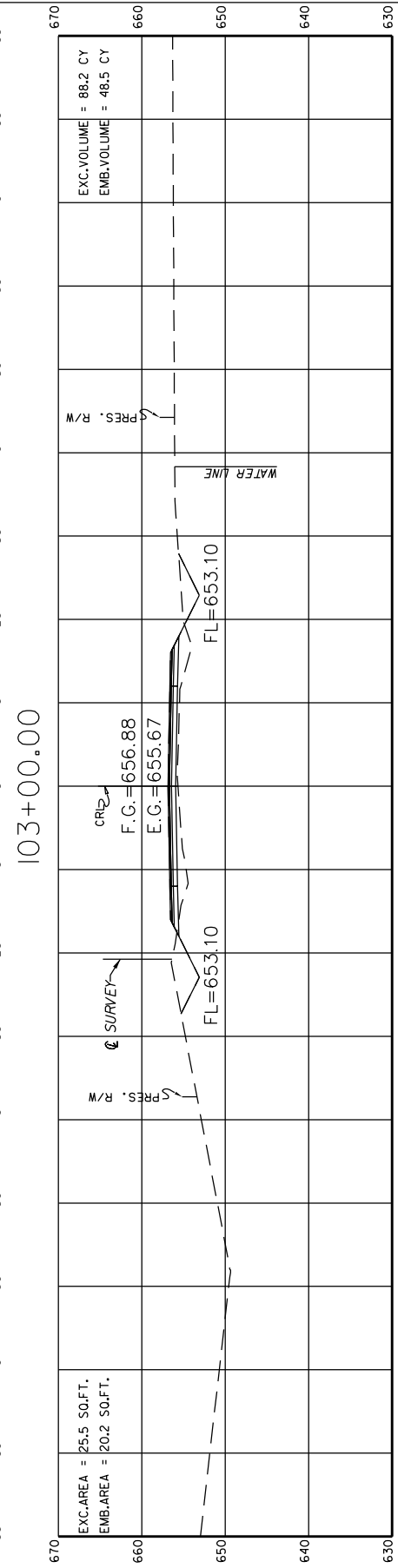
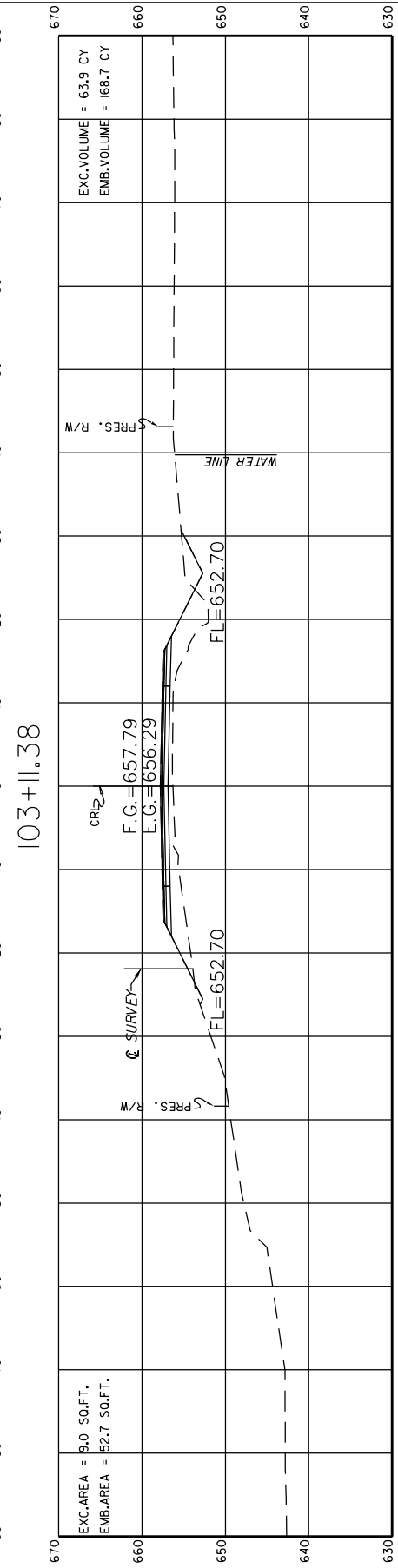
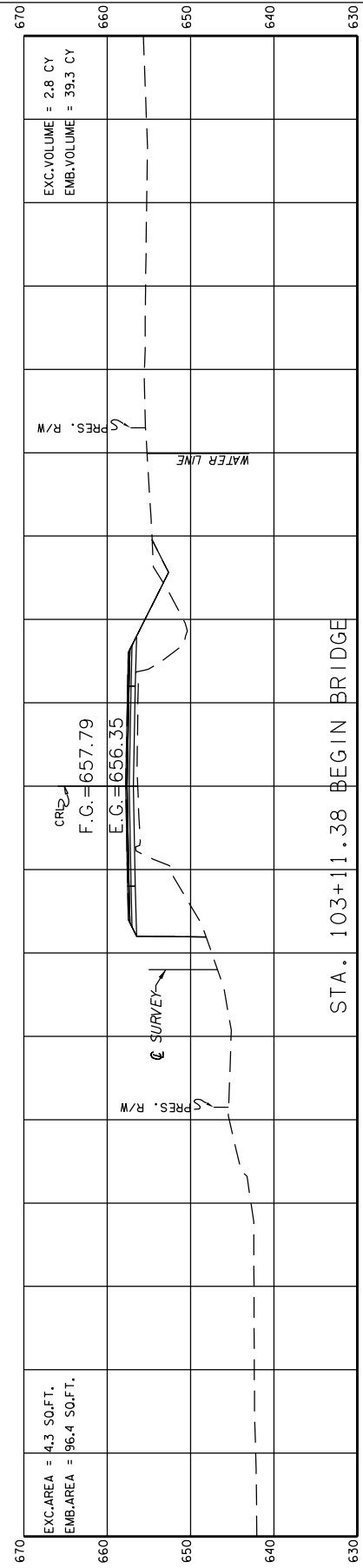
Element:	Line	STATION	EASTING	NORTHING
POB (25)		0+00.00	2752921.9435000	574458.2955000
POE (98)		13+23.34	2754244.77812	50574495.0403250
Tangent Direction:			N 88°24'31.99" E	
Tangent Length:			1323.34	

PLS	RES	SOUTHEAST 3 CIRCUIT ENGINEERING DIST.
DRAWN	RES	
CHECKED		
APPROVED		
CREW		

SURVEY DATA SHEET

SHEET 1 OF 1

PROJECT: LOCAL ID # 29946(04) SHEET NO. 5001



FW-1470/SW-LIMESTONE RD. LATIMER COUNTY
SOUTHEAST #3 CIRCUIT ENGINEERING DISTRICT

CROSS SECTION

