CEC // TRANSPORTATION

REVISIONS	
DESCRIPTION	DATE

SURVEY CONTROL DATA

SEE SURVEY DATA SHEETS S001-S013

DESIGN DATA

ADT 2024	- 408
ADT 2044	- 606
DHV (TWO WAY)	- 72
K (DHV/ADT)	- 12%
D	- 57%
T(% of DHV)	- 26%
T(% of ADT)	- 28%
T3(% of ADT)	- 23%
(20)FLEX ESAL'S	- 1.37 M
SH-94 MAINLINE	65 MPH
SH-94 DETOUR	45 MPH

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED
STATE HIGHWAY

FEDERAL AID PROJECT NO. STP-270C(049)PM

BRIDGE AND APPROACH PLANS

SH-94 OVER BEAVER RIVER

TEXAS COUNTY

STATE JOB NO. 33323(04)
CONTROL SECTION NO. 94-70-26
BRIDGE A LOCATION NO. 7026 0307X
CONSTRUCT NBI NO. 33243, REMOVE NBI NO. 19274

BRIDGE 'A'
LOCATION NO. 7026 0307X
NBI NO. 33243 (EXIST. NBI NO.19274)
BEGIN BRIDGE STA. 181+82.70
BRIDGE LENGTH = 331.66'
END BRIDGE STA. 185+14.36

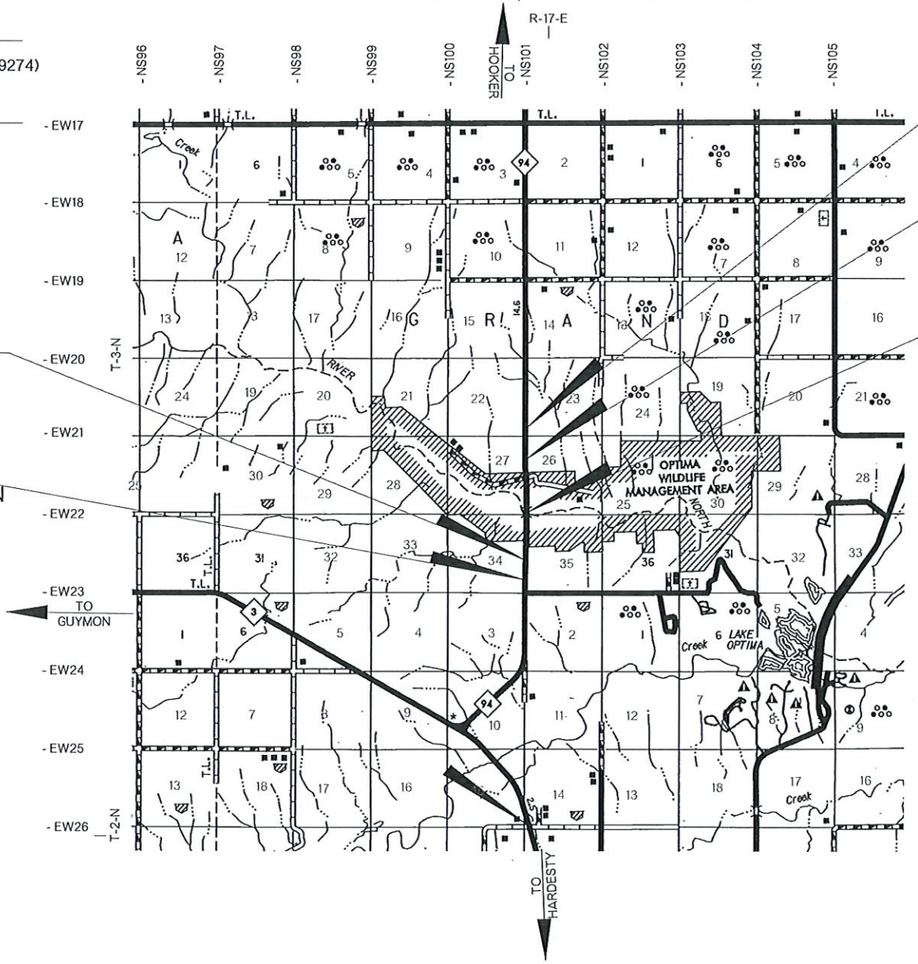
STA. 164+35.71
END INCIDENTAL CONSTRUCTION
BEGIN CONSTRUCTION
CONTROL SUBSECTION = 2.75 MI.

STA. 159+35.00
BEGIN INCIDENTAL CONSTRUCTION

STA. 211+66.00
END INCIDENTAL CONSTRUCTION

STA. 206+66.00
END CONSTRUCTION
BEGIN INCIDENTAL CONSTRUCTION

BRIDGE 'A'

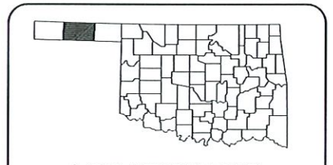


SCALES

PLAN	1:50
PROFILE HOR.	1:50
VER.	1:10
LAYOUT MAP	1"=5280'

CONVENTIONAL SYMBOLS

- PROPOSED ROADS
- SECTION LINES
- QUARTER SECTION LINES
- FENCES
- EXISTING GRADE
- EXISTING ROADS
- BASE LINE
- PROPOSED GRADE
- TUG — COMMUNICATION LINES (EXISTING)
- POWER LINES (EXISTING)
- OHE — OVERHEAD POWER LINES (EXISTING)
- PUG — POWER UNDER GROUND LINES (EXISTING)
- G — GAS LINE (EXISTING)
- SS — SANITARY SEWER LINES (EXISTING)
- ST — STORM SEWER LINES (EXISTING)
- W — WATER LINES (EXISTING)
- TUG — COMMUNICATION LINES (PROPOSED)
- OHE — POWER LINES (PROPOSED)
- PUG — POWER LINES (PROPOSED)
- G — GAS LINE (PROPOSED)
- SS — SANITARY SEWER LINES (PROPOSED)
- ST — STORM SEWER LINES (PROPOSED)
- W — WATER LINES (PROPOSED)
- BUILDINGS
- DRAINAGE STRUCTURES (EXISTING)
- DRAINAGE STRUCTURES (PROPOSED)
- RIGHT-OF-WAY LINES (EXISTING)
- RIGHT-OF-WAY LINES (PROPOSED)
- RIGHT-OF-WAY FENCE
- FLOWLINE (EXISTING)
- FLOWLINE (PROPOSED)
- TOE OF SLOPE (EXISTING)
- TOE OF SLOPE (PROPOSED)
- CITY LIMITS
- LANDSCAPE
- RAILROAD



LOCATION MAP

ROADWAY LENGTH	3,898.63 FT	0.738 MI
BRIDGE LENGTH	331.66 FT	0.063 MI
TOTAL PROJECT LENGTH		0.801 MI

EXCEPTIONS_____NONE

EQUATIONS_____NONE

2019 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION-ENGLISH GOVERN, APPROVED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION. DECEMBER 18, 2019

P.E. NO. 33323(01)

PREPARED BY:
CEC CORPORATION
CA32 6/30/24
OKLAHOMA CITY, OKLAHOMA

CEC

REGISTERED PROFESSIONAL ENGINEER — J. TAYLOR BARNES — 21098 — OKLAHOMA

J. TAYLOR BARNES — DATE 12/1/23
OKLA. REG. NO. 21098

REGISTERED PROFESSIONAL ENGINEER — ERIK REYES — 33498 — OKLAHOMA

ERIK REYES — DATE 12/1/23
OKLA. REG. NO. 33498

SHEETS AB01-AB02
SHEETS B001-B024

OKLAHOMA DEPARTMENT OF TRANSPORTATION	DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION
DATE APPROVED	DATE APPROVED
BY	BY
CHIEF ENGINEER	DIVISION ADMINISTRATOR

SWO NO. 5356(1) PROJ. NO. STP-270C(049)PM SHEET NO. 0001

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CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE

INDEX OF SHEETS

THE FOLLOWING ODOT STANDARDS ARE REQUIRED FOR THIS PROJECT:

2019 ROADWAY STANDARDS

TESCA-0
RSF-0
TSD-0
SSS-2-1
PSE-2-1
SPI-5-2
PBB-1-2
FHTMPP-2-1
PUD-4-1

2009 BRIDGE STANDARDS

TR4-2-00E
EJ-SQ-04E
EJ-DTL-02E
HP1-2-01E
B40-C-TR4-O-1-01E
B40-C-TR4-O-2-01E

2009 TRAFFIC STANDARDS

PM3-1-02
DU1-1-00
DU2-1-00
WSD3-1-00
SBS1-1-00
GMS1-1-00
SSP1-1-02
SSA1-1-00
TCS1-1-01
TCS2-1-00
TCS3-1-01
TCS4-1-01
TCS5-1-00
TCS6-1-02
TCS7-1-02
TCS8-1-00
TCS9-1-01
TCS10-1-00
TCS11-1-01
TCS14-1-00
TCS19-1-01
TCS20-1-00
TCS21-1-02
TCS22-1-00
TCS24-1-02
THRI-1-02
SKT-1-00
GHW1-1-00
GHW2-1-00
RS2-2-00
RS3-1-00

SH-94 OVER BEAVER RIVER — TEXAS COUNTY

INDEX OF SHEETS & STANDARDS

JOB PIECE NO. 33323(04) SHEET NO. 0002

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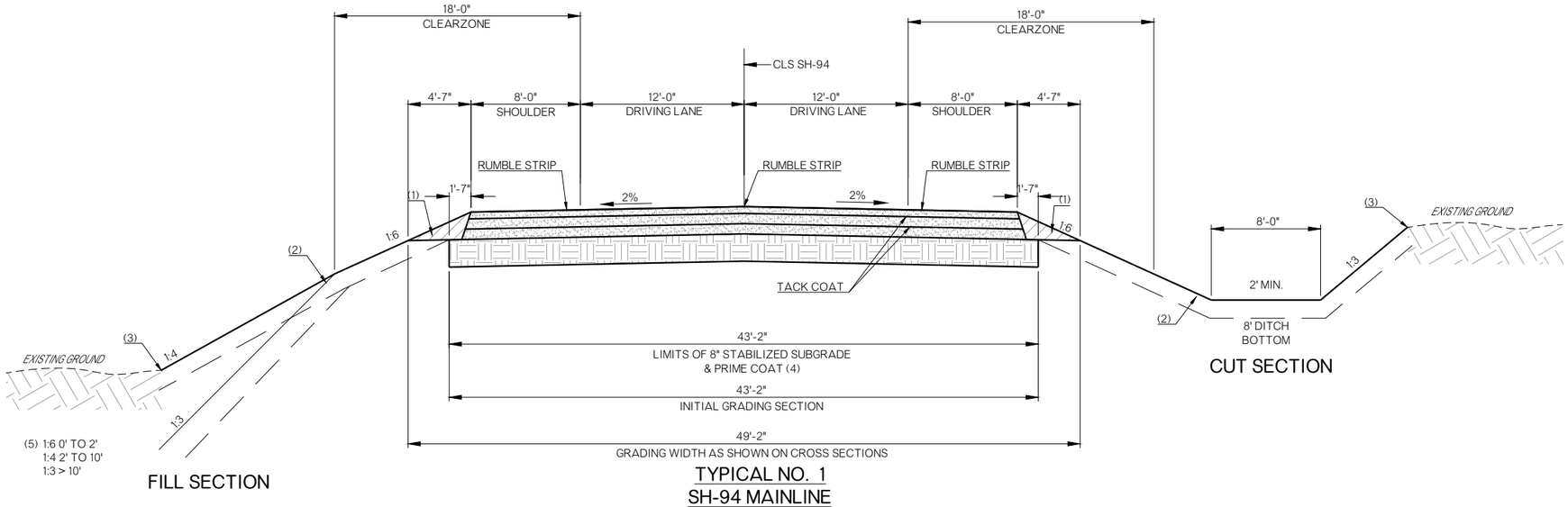
REVISIONS

DESCRIPTION	DATE



FILL SECTION

CUT SECTION

TYPICAL NO. 1
SH-94 MAINLINE
CLS STA. 177+50.00 TO CLS STA. 181+52.70
CLS STA. 185+44.36 TO CLS STA. 189+50.00

PAVEMENT REQUIREMENT		
PAVEMENT STRUCTURE	DRIVING LANES	SHOULDERS
SURFACE COURSE	2" TYPE S4 (PG 64-22 OK)	2" TYPE S3 (PG 64-22 OK)
BASE COURSE	3" TYPE S3 (PG 64-22 OK)	3" TYPE S3 (PG 64-22 OK)
BASE COURSE	3" TYPE S3 (PG 64-22 OK)	3" TYPE S3 (PG 64-22 OK)

NOTES

(1) BACKFILL NOTE:
BACKFILL SHOULDERS WITH UNCLASSIFIED MATERIAL AS PART OF FINISHING OPERATIONS. COST INCLUDED IN OTHER ITEMS OF WORK.

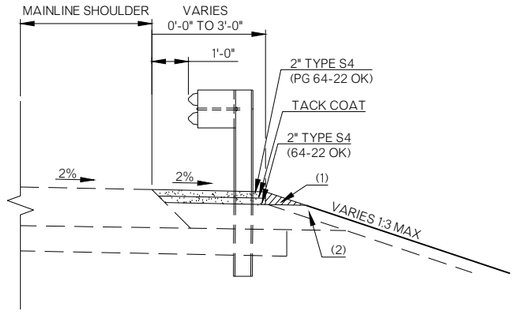
(2) TOPSOIL NOTE:
THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT, AND PLACE IT BACK ON THE SECTION IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATION. RESERVED TOPSOIL SHALL BE SPREAD FIRST ON THE COMPLETED SLOPES OF THE CUT SECTIONS AND THE REMAINDER ON COMPLETED FILL SLOPES OR OTHER PRIORITY AREAS LOCATED BY THE ENGINEER. ALL ADDITIONAL COSTS ASSOCIATED WITH OPERATION SHALL BE INCLUDED IN THE PAY ITEM FOR SALVAGED TOPSOIL, LUMP SUM.

THE GRADING LINE AS SHOWN ON THE CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE CALCULATIONS.

(3) SEE ROUNDING DETAIL, THIS SHEET.

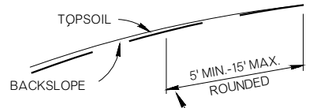
(4) PRIME COAT TO BE APPLIED TO THE TOP OF THE STABILIZED SUBGRADE.

(5) VERTICAL DISTANCE IS MEASURED FROM TOP OF FINISHED SHOULDER SURFACE.

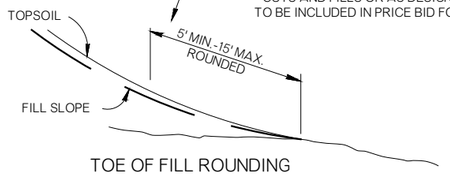


GUARDRAIL WIDENING TYPICAL SECTION
SH-94 MAINLINE
CLS STA. 178+94.70 TO CLS STA. 181+52.70 RT.
CLS STA. 179+19.44 TO CLS STA. 181+52.70 LT.
CLS STA. 185+44.36 TO CLS STA. 188+77.51 RT.
CLS STA. 185+44.36 TO CLS STA. 187+02.51 LT.

TOP OF CUT ROUNDING



INTERSECTION OF CUT AND/OR FILL SLOPES WITH GROUND LINE TO BE ROUNDED AS PART OF FINISHING OPERATIONS. ROUNDING SHALL BE 5' MINIMUM FOR SMALLER CUTS AND FILLS TO 15' MAXIMUM FOR LARGER CUTS AND FILLS OR AS DESIGNATED BY THE ENGINEER. COST OF ROUNDING TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS OF WORK.



TOE OF FILL ROUNDING

SH-94 OVER BEAVER RIVER — TEXAS COUNTY

TYPICAL SECTIONS
SHEET 1 OF 2

JOB PIECE NO. 33323(04) SHEET NO. 0003

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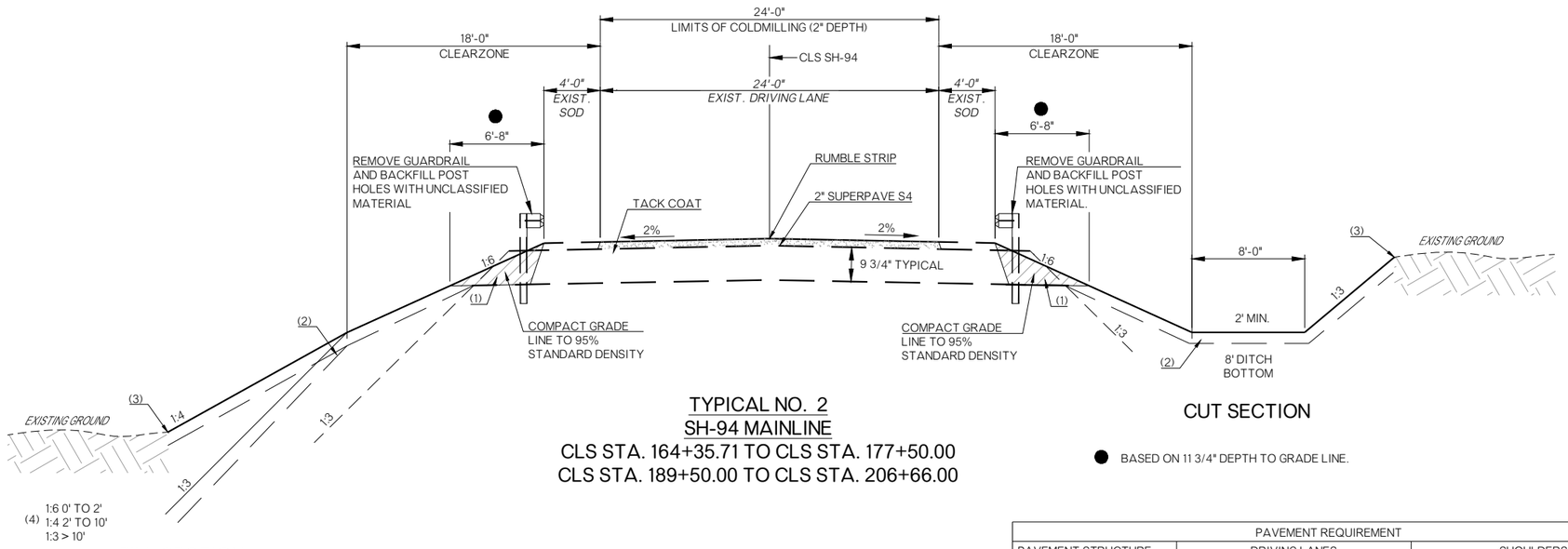
DESCRIPTION	DATE



FILL SECTION

CUT SECTION

TYPICAL NO. 2
SH-94 MAINLINE
CLS STA. 164+35.71 TO CLS STA. 177+50.00
CLS STA. 189+50.00 TO CLS STA. 206+66.00

● BASED ON 11 3/4" DEPTH TO GRADE LINE.

PAVEMENT REQUIREMENT		
PAVEMENT STRUCTURE	DRIVING LANES	SHOULDERS
SURFACE COURSE	2" TYPE S4 (PG 64-22 OK)	2" TYPE S3 (PG 64-22 OK)

NOTES

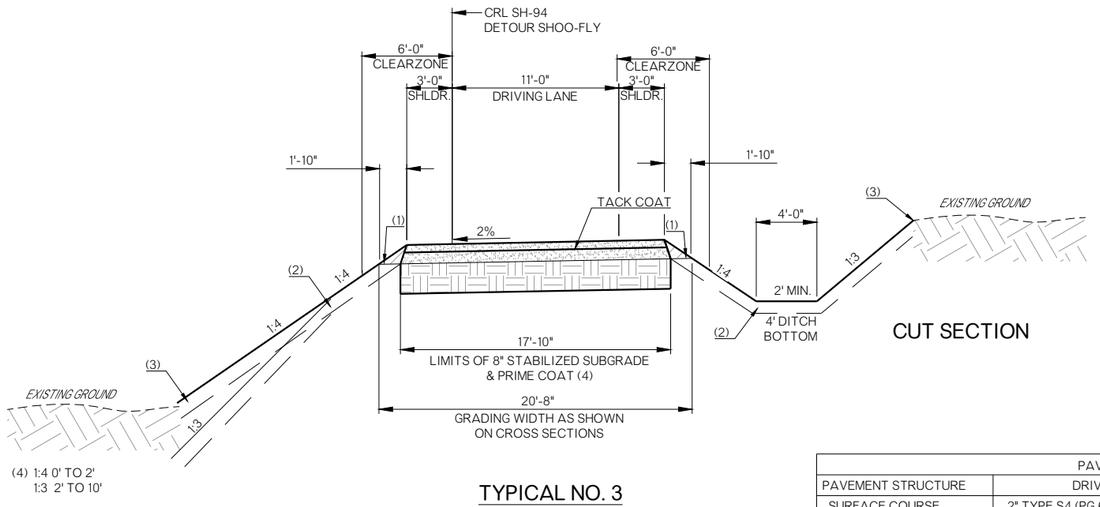
(1) BACKFILL NOTE:
BACKFILL SHOULDERS WITH UNCLASSIFIED MATERIAL AS PART OF FINISHING OPERATIONS. COST INCLUDED IN OTHER ITEMS OF WORK.

(2) TOPSOIL NOTE:
THE 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 SPECIFICATION. RESERVED TOPSOIL SHALL BE SPREAD FIRST ON THE COMPLETED SLOPES OF THE CUT SECTIONS 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 SALVAGED TOPSOIL, LUMP SUM.

THE GRADING LINE AS SHOWN ON THE CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE CALCULATIONS.

(3) SEE ROUNDING DETAIL, 0003.

(4) VERTICAL DISTANCE IS MEASURED FROM TOP OF FINISHED SHOULDER SURFACE.



FILL SECTION

CUT SECTION

TYPICAL NO. 3
DETOUR SHOO-FLY
CRL STA. 174+43.79 TO CRL STA. 192+10.98

PAVEMENT REQUIREMENT		
PAVEMENT STRUCTURE	DRIVING LANES	SHOULDERS
SURFACE COURSE	2" TYPE S4 (PG 64-22 OK)	2" TYPE S4 (PG 64-22 OK)
BASE COURSE	3" TYPE S3 (PG 64-22 OK)	3" TYPE S3 (PG 64-22 OK)

SH-94 OVER BEAVER RIVER — TEXAS COUNTY

TYPICAL SECTIONS
SHEET 2 OF 2

JOB PIECE NO. 33323(04) SHEET NO. 0004

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CEC // TRANSPORTATION

DESCRIPTION	REVISIONS	DATE

BRIDGE GENERAL NOTES

SPECIFICATIONS -

COMPLY WITH THE REQUIREMENTS OF THE 2019 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EXCEPT AS MODIFIED BY THE PLANS AND SPECIAL PROVISIONS.

EXISTING PLANS-

THE EXISTING STRUCTURE WAS ORIGINALLY CONSTRUCTED AS PART OF STATE AID PROJECT NO. 70(11).

CONSTRUCTION PLANS FOR THE EXISTING STRUCTURE MAY BE OBTAINED FROM THE OFFICE SERVICES DIVISION OF THE OKLAHOMA DEPARTMENT OF TRANSPORTATION.

PHYSICAL ADDRESS: OKLAHOMA DEPARTMENT OF TRANSPORTATION
200 NE 21ST STREET
OKLAHOMA CITY, OKLAHOMA 73105
405-521-2586

CONSTRUCTION PLANS ARE AVAILABLE FOR DIGITAL DELIVERY THROUGH THE URL LISTED BELOW:

https://oklahoma.gov/odot/business-center/plans-library/plans-research-request.html

FOR QUESTIONS AND CONCERNS REGARDING AS-BUILT PLANS, PLEASE EMAIL: ODOT-PLANSLIBRARY@ODOT.ORG

FORMING AND PLACING CONCRETE -

ALL PEDESTAL CONCRETE EDGES SHALL HAVE A 3/4" CHAMFER. ALL OTHER EXPOSED CONCRETE EDGES OF THE SUBSTRUCTURE SHALL HAVE A 1 1/2" CHAMFER UNLESS OTHERWISE SHOWN OR NOTED. ALL EXPOSED CONCRETE EDGES OF THE SUPERSTRUCTURE SHALL HAVE A 3/4" CHAMFER UNLESS OTHERWISE SHOWN OR NOTED. ALL CHAMFER STRIPS SHALL BE SIZED LUMBER.

EQUIP CONCRETE VIBRATORS WITH A SHEATH DESIGNED TO PREVENT DAMAGE TO EPOXY COATINGS WHEN VIBRATING CONCRETE CONTAINING EPOXY COATED REINFORCING STEEL.

PILE DRIVING AND CAPACITY -

THE REQUIRED PILE SIZE AND THE FACTORED PILE REACTION ARE SHOWN IN THE PLANS WITH THE FOUNDATION DATA. PERFORM A DYNAMIC LOAD TEST AND PROVIDE A CASE PILE WAVE ANALYSIS PROGRAM (CAPWAP) AT THE END OF DRIVING FOR THE FIRST PILE AT ABUTMENTS AND SLEEPER SLABS IN ACCORDANCE WITH SECTION 514.04.E(4) OF THE SPECIFICATIONS. DRIVE PILING TO THE REQUIRED PILE TIP ELEVATION SHOWN IN THE FOUNDATION DATA.

THE CONTRACTOR SHALL USE A PILE DRIVING HAMMER OF THE SIZE AND TYPE CAPABLE OF CONSISTENTLY DELIVERING THE EFFECTIVE DYNAMIC ENERGY SUFFICIENT TO DRIVE THE PILES TO THE REQUIRED TIP ELEVATION AND TO ACHIEVE THE FACTORED PILE CAPACITY WITHOUT EXCEEDING THE LIMITATIONS SET ON THE ALLOWABLE DRIVING STRESSES IN ACCORDANCE WITH SECTION 514.03.A OF THE SPECIFICATIONS. THE CONTRACTOR SHALL SUBMIT THE PROPOSED PILE DRIVING HAMMER TO THE ENGINEER FOR APPROVAL.

STRUCTURAL STEEL -

STRUCTURAL STEEL FOR PILING SHALL CONFORM TO AASHTO M270 (ASTM A572), GRADE 50.

STRUCTURAL STEEL FOR ANCHOR PLATES, CONTACT PLATES, AND BUILT-UP CONTACT ANGLES SHALL CONFORM TO ASTM A240 (AUSTENITIC STAINLESS STEEL, TYPE 316, CHARPY V-NOTCH TESTING NOT REQUIRED). FOR ANCHOR BOLTS, PROVIDE CONTINUOUSLY THREADED BARS IN ACCORDANCE WITH ASTM A320, CLASS 2, GRADE B8M (AUSTENITIC STAINLESS STEEL, TYPE 316, CHARPY V-NOTCH TESTING NOT REQUIRED). USE AUSTENITIC STAINLESS STEEL NUTS AND WASHERS CONFORMING TO ASTM A194, GRADE 8M AND ASTM A320, RESPECTIVELY. PERFORM ALL WELDING CONSISTENT WITH PROCEDURES FOR STAINLESS STEEL.

PROVIDE STRUCTURAL STEEL FOR DIAPHRAGM BOLTS AND PLATE WASHERS IN ACCORDANCE WITH AASHTO M270 (ASTM A709), GRADE 50W (WEATHERING STEEL, CHARPY V-NOTCH TESTING NOT REQUIRED). THE CONTRACTOR MAY SUBSTITUTE A #10 REINFORCING BAR IN ACCORDANCE WITH AASHTO M31, GRADE 60, AND THREADED AT THE ENDS AS SHOWN FOR THE DIAPHRAGM BOLT AT NO ADDITIONAL COST TO THE DEPARTMENT. PROVIDE HEX NUTS IN ACCORDANCE WITH AASHTO M291 (ASTM A563).

PAINT EXPOSED DIAPHRAGM BOLT, PLATE WASHER, AND HEX NUT WITH TWO (2) COATS OF ZINC-RICH PAINT (6 MIL MINIMUM THICKNESS) AFTER ASSEMBLY. INCLUDE ALL COST OF DIAPHRAGM BOLT, PLATE WASHER, AND HEX NUT IN THE CONTRACT UNIT PRICE FOR STRUCTURAL STEEL.

PERFORATED PIPE UNDERDRAIN -

PAY ITEM "6" PERFORATED PIPE UNDERDRAIN-ROUND" INCLUDES 42 FEET OF PERFORATED PIPE AT EACH ABUTMENT. THE INSTALLATION OF THE PERFORATED PIPE AND COVER MATERIAL SHALL BE AS SHOWN IN THE PLANS AND ON ODOT STANDARDS FOR PIPE UNDERDRAIN INSTALLATION. AND SUBSTRUCTURE EXCAVATION AND PIPE UNDERDRAIN ASSEMBLY DETAILS.

ALL COSTS OF THE PERFORATED PIPE UNDERDRAIN INSTALLATION INCLUDING MATERIAL, LABOR, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE PER BID PER FOOT OF "6" PERFORATED PIPE UNDERDRAIN-ROUND."

NON-PERFORATED PIPE UNDERDRAIN -

PAY ITEM "6" NON-PERF. PIPE UNDERDRAIN RND." INCLUDES 30 FEET OF NON-PERFORATED PIPE AT EACH ABUTMENT. THE INSTALLATION OF THE NON-PERFORATED PIPE AND COVER MATERIAL SHALL BE AS SHOWN IN THE PLANS AND ON ODOT STANDARDS FOR PIPE UNDERDRAIN INSTALLATION.

A MARKER POST SHALL BE SET AT DRAIN OUTLETS BY THE CONTRACTOR IN A MANNER DIRECTED BY THE ENGINEER. MARKER POST SHALL BE TREATED WOOD MEETING THE REQUIREMENTS OF SECTION 732.02. EXPOSED PORTION OF MARKER POST TO BE PAINTED YELLOW. A REFLECTIVE BAND TO BE FASTENED TO THE MARKER POST IN AN APPROVED MANNER SHALL BE SILVER-WHITE REFLECTIVE SHEETING MEETING THE REQUIREMENTS OF SUBSECTION 719.04, TYPE III. THE SHEETING SHALL BE MOUNTED ON A METAL BAND MEETING THE REQUIREMENTS OF ASTM A526 IN MINIMUM 30 GAUGE (.0157" THICKNESS) FOR GALVANIZED METAL OR ASTM B-209 ALLOY 1060 H-12 IN MINIMUM .016" THICKNESS. THE METAL BANDS SHALL BE FULLY CLEANED AND DEGREASED TO ENSURE BOND WITH REFLECTIVE SHEETING. WORDING PRODUCED BY PHOTOGRAPHIC PROCESS, SILK SCREENING OR HAND LETTERING SHALL BE IN OR ON THE REFLECTIVE SHEETING.

ALL COSTS OF THE NON-PERFORATED PIPE UNDERDRAIN, MARKER POST AND REFLECTIVE METAL BAND INSTALLATION INCLUDING MATERIAL, LABOR, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF "6" NON-PERF. PIPE UNDERDRAIN RND."

RIPRAP AND FILTER BLANKET -

A 24" THICK LAYER OF TYPE I-A PLAIN RIPRAP WITH 6" THICK LAYER OF TYPE I-A FILTER BLANKET SHALL BE PLACED ALONG THE CHANNEL OF BRIDGE "A" AS SHOWN IN THE PLANS. THE FILTER BLANKET SHALL BE PLACED IN ONE LAYER.

STAINLESS STEEL FIXED BEARING ASSEMBLIES -

PROVIDE AND INSTALL FIXED BEARING ASSEMBLIES OF THE SIZE, SHAPE, AND LOCATION AS SHOWN IN THE PLANS. THERE IS ESTIMATED TOTAL OF 2,300 POUNDS OF STAINLESS STEEL FOR FIXED BEARING ASSEMBLIES. WELD ASSEMBLIES IN ACCORDANCE WITH AWS D1.5, STRUCTURAL WELDING CODE. ANCHOR BOLTS SHALL BE INSTALLED IN FRESH CONCRETE AS SHOWN IN THE BEARING DETAILS SHEET(S).

ALL COSTS ASSOCIATED WITH PROVIDING AND INSTALLING THE FIXED BEARING ASSEMBLIES AS SHOWN ON THE PLANS, INCLUDING ELASTOMERIC PADS, ANCHOR PLATES, CONTACT PLATES, ANCHOR BOLTS, NUTS, WASHERS, LABOR, EQUIPMENT, MATERIAL, AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER EACH OF "STAINLESS STEEL FIXED BEARING ASSEMBLY".

STAINLESS STEEL EXPANSION BEARING ASSEMBLIES -

PROVIDE AND INSTALL EXPANSION BEARING ASSEMBLIES OF THE SIZE, SHAPE, AND LOCATION AS SHOWN IN THE PLANS. THERE IS ESTIMATED TOTAL OF 4,600 POUNDS OF STAINLESS STEEL FOR EXPANSION BEARING ASSEMBLIES. WELD ASSEMBLIES IN ACCORDANCE WITH AWS D1.5, STRUCTURAL WELDING CODE. ANCHOR BOLTS SHALL BE INSTALLED IN FRESH CONCRETE AS SHOWN IN THE "DETAILS OF BEARING ASSEMBLIES" SHEET.

ALL COSTS ASSOCIATED WITH PROVIDING AND INSTALLING THE EXPANSION BEARING ASSEMBLIES AS SHOWN ON THE PLANS, INCLUDING ELASTOMERIC PADS, ANCHOR PLATES, CONTACT ANGLES, ANCHOR BOLTS, NUTS, WASHERS, LABOR, EQUIPMENT, MATERIAL, AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER EACH OF "STAINLESS STEEL EXP. BEARING ASSEMBLY".

DECK CONCRETE -

PROVIDE CLASS AA CONCRETE FOR BRIDGE DECK CONSTRUCTION IN ACCORDANCE WITH SECTION 509 OF THE SPECIFICATIONS EXCEPT AS MODIFIED BELOW:

DECK SPAN NO. 1: INTERNALLY CURED CONCRETE (IC) IN ACCORDANCE WITH SPECIAL PROVISION 509-1(a-e) 19.

DECK SPAN NO. 3: COLLOIDAL SILICA CONCRETE (CS) IN ACCORDANCE WITH SPECIAL PROVISION 509-1(a-e) 19.

THE DEPARTMENT WILL CONSIDER THE COST OF ALL MATERIALS, EQUIPMENT, LABOR, AND INCIDENTALS NECESSARY FOR PROPORTIONING, MIXING, DELIVERY, STORAGE, HANDLING, SURFACE PREPARATION, INSTALLATION, SAMPLING, AND TESTING OF INTERNALLY CURED CONCRETE AND COLLOIDAL SILICA CONCRETE BE INCLUDED IN THE UNIT PRICE BID FOR "INTERNALLY CURED CONCRETE" AND "COLLOIDAL SILICA CONCRETE". INCLUDE ALL OTHER COSTS ASSOCIATED WITH CONSTRUCTING THE BRIDGE DECK AS SHOWN IN THE PLANS, INCLUDING MATERIALS, LABOR, EQUIPMENT, AND INCIDENTALS IN THE UNIT PRICE BID FOR "CLASS AA CONCRETE".

WATER REPELLENT TREATMENT-

WATER REPELLENT TREATMENT SHALL BE APPLIED TO THE BRIDGE IN A MANNER CONSISTENT WITH THE DETAILS SHOWN IN THE PLANS.

URETHANE COATING SURFACE TREATMENT-

THE CONCRETE FINISH SHALL BE A LIQUID APPLIED URETHANE COATING CIM 1000 AS MANUFACTURED BY CIM INDUSTRIES. PRODUCT INFORMATION FOR CIM 1000 CAN BE OBTAINED FROM LASTER CASTOR CORP. OF TULSA, OKLAHOMA, PHONE NUMBER (918) 234-7777.

THE CONCRETE FINISH SHALL BE APPLIED TO THE FOLLOWING CONCRETE SURFACES OF THE BRIDGE AND IN A MANNER CONSISTENT WITH THE DETAILS SHOWN IN THE PLANS:

(1) PIER CAP: TOP OF PIER CAP AND ALL SURFACES OF PEDESTALS (EXCEPT AS NOTED BELOW) AND STEPS; 6" DOWN FROM TOP OF PIER CAP ON SIDES AND ENDS.

(2) ABUTMENT SEAT: TOP OF BRIDGE SEAT AND ALL SURFACES OF PEDESTALS (EXCEPT AS NOTED BELOW) AND STEPS; 6" DOWN FROM TOP OF BRIDGE SEAT ON SIDES AND FRONT.

(3) ABUTMENT BACKWALL: ALONG THE FRONT FACE OF BACKWALL FROM TOP OF BRIDGE SEAT TO AN ELEVATION 6" ABOVE THE TALLEST PEDESTAL.

DO NOT APPLY URETHANE COATING UNDER THE ELASTOMERIC BEARING PADS.

THE EQUIPMENT AND METHODS OF APPLYING THE URETHANE COATING SHALL BE IN ACCORDANCE WITH THE PRODUCT COATING PROFILE AND INSTRUCTION GUIDES FOR APPLICATION TO CONCRETE. PRECAUTIONARY MEASURES SHALL BE IN ACCORDANCE WITH THE MATERIAL SAFETY DATA SHEETS AS PROVIDED BY THE MANUFACTURER.

THE COATING SHALL BE A MINIMUM OF 68 MILS WET THICKNESS AND 60 MILS DRY THICKNESS. IN ADDITION TO APPLYING THE COATING TO THE CONCRETE SUBSTRUCTURE UNITS, THE COATING SHALL TURN UP THE VERTICAL SURFACES OF THE PIER AND ABUTMENT PEDESTALS AND ABUTMENT BACKWALL AS TO PROVIDE A WATER TIGHT SEAL. SURFACE PREPARATIONS AND PRODUCT MIXING SHALL BE PER THE MANUFACTURER'S RECOMMENDATIONS. ALL CONCRETE WORK SHALL BE COMPLETED PRIOR TO THE APPLICATION OF THE CONCRETE FINISH AND ALL NEW CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 3000 PSI AT THE TIME OF APPLICATION. MASK AREAS PRIOR TO APPLICATION TO PROVIDE A CLEAN STRAIGHT FINISH. PRIMER SHALL BE APPLIED TO THE CONCRETE SURFACES PRIOR TO APPLYING THE COATING.

WATER REPELLENT WILL NOT BE REQUIRED ON SURFACES THAT ARE COATED WITH URETHANE COATING.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE BID FOR "ELASTOMERIC COATING", AND SHALL INCLUDE FULL COMPENSATION FOR ALL MATERIALS, LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SPECIFIED.

REMOVAL OF EXISTING BRIDGE STRUCTURE-

THE PAY ITEM "REMOVAL OF EXISTING BRIDGE STRUCTURE" INCLUDES REMOVAL AND DISPOSAL OF SUPERSTRUCTURE AND SUBSTRUCTURE OF EXISTING (7) 100' TYPE IV PC BEAM SPAN BRIDGE (NBI NO. 19274). ALL WORK SHALL BE DONE IN ACCORDANCE WITH SUBSECTION 619.04.B(2) OF THE SPECIFICATIONS AND IN A MANNER APPROVED BY THE ENGINEER.

BEFORE MAKING ANY REMOVALS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A PLAN FOR REMOVING THE EXISTING BRIDGE. THE CONTRACTOR SHALL NOT MAKE ANY REMOVALS UNTIL THE PLAN HAS BEEN APPROVED BY THE ENGINEER. THE PLAN SHALL INCLUDE A LIST OF ALL EQUIPMENT THAT WILL BE USED TO MAKE THE REMOVALS, A DESCRIPTION OF HOW THE EQUIPMENT WILL BE USED TO MAKE THE REMOVALS AND A SEQUENTIAL LIST OF STEPS THAT WILL BE FOLLOWED BY THE CONTRACTOR TO MAKE THE REMOVALS.

ALL MATERIALS REMOVED FROM THE EXISTING BRIDGE SHALL BE PREVENTED FROM ENTERING THE WATER AND LOWER BANK AREA OF THE CHANNEL. ALL MATERIALS REMOVED FROM THE EXISTING BRIDGE SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

WITH THE APPROVAL OF THE ENGINEER, PIECES OF THE EXISTING CONCRETE BRIDGE DECK MAY BE PLACED ON THE ABUTMENT SLOPES AS SLOPE PROTECTION. THE SIZE, CONDITION, AND PLACEMENT LOCATION OF EXISTING DECK CONCRETE SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED OR AS SHOWN IN THE PLANS INCLUDING THE COST OF MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER LUMP SUM OF "REMOVAL OF EXISTING BRIDGE STRUCTURE".

SH-94 OVER BEAVER RIVER
BRIDGE "A"
TEXAS COUNTY

GENERAL NOTES AND SUMMARY OF PAY ITEMS (BRIDGE)
(1 OF 2)

DESIGN	EBR	
DETAIL	JFR	BFE
CHECK	EBR	

CEC

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 33323(04)
SHEET NO. AB01

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Save date: 12/8/2023 1:27:07 PM, JAMES RINEHART, Plot date: 12/8/2023 1:29:19 PM, JAMES RINEHART, DWG To PDF.pc3

CEC // TRANSPORTATION		
DESCRIPTION	REVISIONS	DATE

J.P. NO. 33323(04)
0200 BRIDGE "A"
N.B.I. NO. 33243

PAY QUANTITIES

SH-94 OVER BEAVER RIVER,
100'-130'-100' TYPE J P.C. BEAM SPANS, 0° SKEW,
40'-0" CLEAR ROADWAY, WITH TR4 CONCRETE RAILS, ℄ STA. 183+48.53

ITEM NO.		DESCRIPTION		UNIT	QUANTITY
501(B)	1300	SUBSTRUCTURE EXCAVATION COMMON	(BR-1)	C.Y.	240.00
501(E)	1600	SELECT BACKFILL	(BR-1)	C.Y.	20.00
501(G)	1800	CLSM BACKFILL	(BR-1)	C.Y.	282.60
503(A)	4270	PRESTRESSED CONCRETE BEAMS (TYPE J BT)	(BR-1)	L.F.	1,645.00
504(A)	5200	APPROACH SLAB	(BR-1)	S.Y.	281.20
504(B)	5300	SAW-CUT GROOVING	(BR-1)	S.Y.	1,740.90
504(D)	5420	CONCRETE RAIL (TR4)	(BR-1)	L.F.	783.40
506(A)	7200	STRUCTURAL STEEL	(BR-1)	LB.	3,890.00
507(A)	8200	STAINLESS STEEL FIXED BEARING ASSEMBLY	(BR-1)	EA.	10.00
507(B)	8300	STAINLESS STEEL EXP. BEARING ASSEMBLY	(BR-1)	EA.	20.00
509(A)	0210	CLASS AA CONCRETE	(BR-1)	C.Y.	440.70
509(B)	0320	CLASS A CONCRETE	(BR-1)	C.Y.	268.20
509(H)	0900	(SP) INTERNALLY CURED CONCRETE	(BR-1)	S.F.	4,251.80
509(I)	1000	(SP) COLLOIDAL SILICA CONCRETE	(BR-1)	S.F.	4,251.80
511(A)	2210	REINFORCING STEEL	(BR-1)	LB.	680.00
511(B)	2310	EPOXY COATED REINFORCING STEEL	(BR-1)	LB.	154,190.00
514(A)	5220	PILES, FURNISHED (HP 12X53)	(BR-2)	L.F.	1,077.00
514(A)	5230	PILES, FURNISHED (HP12X74)	(BR-2)	L.F.	1,898.00
514(B)	5320	PILES, DRIVEN (HP 12X53)		L.F.	1,077.00
514(B)	5330	PILES, DRIVEN (HP12X74)	(BR-2)	L.F.	1,898.00
514(F)	5700	PILE LOAD TEST (DYNAMIC)	(BR-3)	EA.	2.00
514(K)	6200	(PL) PILOT HOLES	(BR-4)	L.F.	559.00
514(L)	6300	PILE SPLICE, H-PILE (NON-BIDDABLE)		EA.	1.00
515(A)	7200	WATER REPELLENT (VISUALLY INSPECTED)	(BR-1)	S.Y.	1,489.00
516(A)	8250	DRILLED SHAFTS 72" DIAMETER	(BR-5)	L.F.	380.00
516(C)	8400	CROSSHOLE SONIC LOGGING		EA.	1.00
517	9110	ELASTOMERIC COATING	(BR-1)	S.F.	1,066.00
518(B)	0300	SEALED EXPANSION JOINTS	(BR-1)	L.F.	43.20
523(A)	3200	SEALER CRACK PREPARATION	(BR-1, 6)	L.F.	40.80
523(B)	3300	SEALER RESIN	(BR-1, 7)	GAL.	0.50
601(B)	1230	TYPE I-A PLAIN RIPRAP	(BR-8)	TON	4,290.00
601(C)	1310	TYPE I-A FILTER BLANKET	(BR-9)	TON	770.00
613(H)	6205	6" PERFORATED PIPE UNDERDRAIN ROUND	(BR-1)	L.F.	84.00
613(I)	6310	6" NON-PERF. PIPE UNDERDRAIN RND.		L.F.	60.00
619(D)	6700	REMOVAL OF EXISTING BRIDGE STRUCTURE		L.SUM	1.00

J.P. NO. 33323(04)
0600
STAKING

PAY QUANTITIES

ITEM NO.		DESCRIPTION	UNIT	QUANTITY
642(B)	3300	CONSTRUCTION STAKING LEVEL II	L.SUM	1.00

J.P. NO. 33323(04)
0640
CONSTRUCTION

PAY QUANTITIES

ITEM NO.		DESCRIPTION	UNIT	QUANTITY
220	1100	SWPPP DOCUMENTATION AND MANAGEMENT	L.SUM	1.00
641	2100	MOBILIZATION	L.SUM	1.00

BRIDGE PAY ITEM NOTES

(BR-1) PAYMENT FOR THIS ITEM WILL BE BASED ON PLAN QUANTITIES ONLY. SEE SECTION 109.01.B OF THE STANDARD SPECIFICATIONS.

(BR-2) PAYMENT TO THE CONTRACTOR WILL BE BASED ON PLAN QUANTITIES UNLESS ADDITIONAL PILING LENGTH IS REQUIRED. ADDITIONAL PILES, FURNISHED, AS AUTHORIZED BY THE ENGINEER, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE.

(BR-3) PERFORM DYNAMIC LOAD TESTS AND A CASE PILE WAVE ANALYSIS PROGRAM (CAPWAP) ON THE FIRST PILE TESTED AT ABUTMENTS AND SLEEPER SLABS. ADDITIONAL DYNAMIC LOAD TESTS, IF DIRECTED BY THE ENGINEER, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE. INCLUDE ALL COSTS ASSOCIATED WITH THE DYNAMIC LOAD TESTS, INCLUDING CAPWAP, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK, IN THE CONTACT UNIT PRICE OF "PILE LOAD TEST (DYNAMIC)".

(BR-4) PREBORE PILOT HOLES FOR PILES AS SHOWN IN THE PLANS AND IN ACCORDANCE WITH SUBSECTION 514.04.C(1)B OF THE SPECIFICATIONS. INCLUDE ALL COSTS ASSOCIATED WITH THE PILOT HOLES, INCLUDING BACKFILL, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK, IN THE CONTRACT UNIT PRICE OF "(PL)PILOT HOLES." THE BACKFILL CONSISTS OF AN ESTIMATED TOTAL OF 51.6 C.Y. OF CLASS A CONCRETE.

(BR-5) THE CONCRETE USED FOR THE CONSTRUCTION OF THE PIER DRILLED SHAFTS SHALL BE CLASS AA CONCRETE WITH THE ADDITION OF A LOW-SHRINKAGE ADMIXTURE. LIMIT SHRINKAGE TO A MAXIMUM OF 0.04% SHRINKAGE AT 28 DAYS, AS TESTED BY ASTM C157.
THE PERMANENT CASING METHOD AS DESCRIBED IN SUBSECTION 516.04C OF THE STANDARD SPECIFICATIONS WILL BE REQUIRED. PROVIDE PERMANENT CASING THE ENTIRE LENGTH OF THE DRILLED SHAFT. THE DOUBLE CASING METHOD WILL NOT BE ALLOWED FOR THE HOLE EXCAVATION.
ALL COSTS ASSOCIATED WITH THE USAGE OF LOW-SHRINKAGE ADMIXTURE AND PERMANENT CASING, INCLUDING MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT OF "DRILLED SHAFTS 72" DIAMETER".

(BR-6) PREPARE SURFACE AND INSTALL HIGH MOLECULAR WEIGHT METHACRYLATE SEALER FOR DECK SLAB CONSTRUCTION JOINTS AT LOCATIONS SHOWN IN THE PLANS IN ACCORDANCE WITH SECTION 523 OF THE SPECIFICATIONS. INCLUDE COSTS FOR LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN THE CONTRACT UNIT PRICE OF "SEALER CRACK PREPARATION".

(BR-7) PROVIDE HIGH MOLECULAR WEIGHT METHACRYLATE SEALER FOR DECK SLAB CONSTRUCTION JOINTS AT LOCATIONS SHOWN IN THE PLANS IN ACCORDANCE WITH SECTION 523 OF THE SPECIFICATIONS. INCLUDE ALL COSTS OF THE SEALER RESIN MATERIAL IN THE CONTRACT UNIT PRICE OF "SEALER RESIN". SEALER RESIN QUANTITY ESTIMATED AT 0.011 GALLONS PER FOOT OF CONSTRUCTION JOINT.

(BR-8) RIPRAP QUANTITY ESTIMATED AT 120 LBS. PER CUBIC FOOT.

(BR-9) FILTER BLANKET QUANTITY ESTIMATED AT 105 LBS. PER CUBIC FOOT.

SH-94 OVER BEAVER RIVER
BRIDGE "A"
TEXAS COUNTY

GENERAL NOTES AND SUMMARY
OF PAY ITEMS (BRIDGE)
(2 OF 2)

DESIGN	EBR	
DETAIL	JFR	BFE
CHECK	EBR	

CEC

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 33323(04)
SHEET NO. AB02

REVISIONS		
REV. NO.	DESCRIPTION	DATE

ENVIRONMENTAL MITIGATION NOTES

EARTHWORK NOTE:
THE CONTRACTOR MUST ENSURE THAT ANY MATERIAL INCORPORATED INTO THE PROJECT IS FREE OF ANY HAZARDOUS, INDUSTRIAL OR CONTAMINATED WASTE, REFER TO SUB-SECTIONS 106.01 AND 202.02 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

IMPORTED MATERIAL (EG. BORROW) - IF MATERIAL IS IMPORTED TO THE PROJECT AND AT ANY POINT THE MATERIAL IS DETERMINED BY THE ENGINEER TO INCLUDE ANY TYPE OF UNACCEPTABLE CONTAMINATION, THE MATERIAL MAY REQUIRE REMOVAL, IN WHOLE, OR IN PART. IF REMOVAL IS REQUIRED, THEN THE INITIAL PLACEMENT, REMOVAL AND PROPER DISPOSAL OF THIS MATERIAL SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE DISPOSAL OF THE UNACCEPTABLE MATERIAL SHALL BE APPROVED BY THE ENGINEER, REFER TO SUB-SECTION 107.15 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

TO ASSIST THE CONTRACTOR, THE "OFF PROJECT FACILITY/BORROW SITE HAZARDOUS MATERIALS QUESTIONNAIRE" IS PROVIDED ON THE DEPARTMENT'S WEB SITE:

https://oklahoma.gov/content/dam/ok/en/odot/documents/ok-gov-docs/programs-and-projects/environmental/hazard-questionnaire-2016.pdf

THIS QUESTIONNAIRE IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR SO THAT A CLEARER UNDERSTANDING OF THE CHARACTERISTICS OF THE PROPOSED SITE/ MATERIAL IS ACHIEVED. COMPLETION AND SUBMITTAL OF THIS FORM TO THE ENGINEER DOES NOT EXCUSE THE CONTRACTOR FROM PROVIDING MATERIALS THAT ARE FREE OF HAZARDOUS AND INDUSTRIAL COMPOSITION IN ACCORDANCE WITH SUB-SECTIONS 106.01 AND 202.02 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

NON-COMPLIANCE NOTE:
FAILURE TO IMPLEMENT THE COMMITMENTS SPECIFIED IN THE PLAN NOTES CAN RESULT IN NON-COMPLIANCE ISSUES ON THE PROJECT. WORK ACTIVITIES MAY BE SUSPENDED ON THE PROJECT, FOR AN UNDETERMINED DURATION, WHILE WORKING WITH REGULATORS TO BRING THE PROJECT BACK INTO COMPLIANCE. THE CONTRACTOR WILL NOT BE COMPENSATED FOR TIME LOST.

WATER QUALITY CONSERVATION NOTE:
APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE IMPACTS FROM STORM WATER DISCHARGES AND SEDIMENTATION IN STREAMS, AS ESTABLISHED BY THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY, SHALL BE CONSCIENTIOUSLY IMPLEMENTED THROUGHOUT THE PROPOSED CONSTRUCTION PERIODS, IN ORDER TO MINIMIZE ANY POTENTIAL IMPACTS TO ANY LISTED SPECIES. THE EFFECTIVENESS OF EROSION CONTROLS SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION ACTIVITIES. HAZARDOUS MATERIALS, CHEMICALS, FUELS, LUBRICATING OILS, AND OTHER SUCH SUBSTANCES SHALL BE STORED AT LEAST 100 FEET FROM THE ORDINARY HIGH WATER MARK (OHWM). REFUELING OF CONSTRUCTION EQUIPMENT SHALL ALSO BE CONDUCTED AT LEAST 100 FEET FROM THE OHWMS. SEDIMENT AND EROSION CONTROLS SHALL BE INSTALLED AROUND STAGING AREAS TO PROHIBIT DISCHARGE OF MATERIALS FROM THESE SITES. CONSTRUCTION WASTE MATERIALS AND DEBRIS SHALL BE STOCKPILED AT LEAST 25 FEET OUTSIDE OF THE OHWMS, AND THESE MATERIALS SHALL BE REMOVED AND DISPOSED OF PROPERLY FOLLOWING COMPLETION OF THE PROJECT. PREVENTATIVE MEASURES MUST BE TAKEN TO PROHIBIT THE DISCHARGE OF CONTAMINANTS INTO ANY SURFACE WATERS.

MIGRATORY BIRD NOTE:
MIGRATORY BIRDS ARE PROTECTED BY THE FEDERAL MIGRATORY BIRD TREATY ACT. MANY BIRDS COMMONLY USE BRIDGES AND CULVERTS FOR NESTING. THE NESTING SEASON FOR MOST MIGRATORY BIRD SPECIES EXTENDS FROM MARCH 1 TO AUGUST 31. MIGRATORY BIRD NESTING USE OF THE BEAVER RIVER BRIDGE (NBI#: 19274) WAS OBSERVED. PAINTING, REPAIR, RETROFIT, REHABILITATION OR DEMOLITION OF THE EXISTING BRIDGE SHALL BE CONDUCTED BETWEEN SEPTEMBER 1, AND FEBRUARY 28, WHEN MIGRATORY BIRD NESTS ARE NOT OCCUPIED. IF PAINTING, REPAIR, RETROFIT, REHABILITATION OR DEMOLITION CANNOT BE COMPLETED BETWEEN SEPTEMBER 1 AND FEBRUARY 28, THE BRIDGE SHALL BE PROTECTED FROM NEW NEST ESTABLISHMENT PRIOR TO MARCH 1, BY MEANS THAT DO NOT RESULT IN BIRD DEATH OR INJURY. OPTIONS INCLUDE THE EXCLUSION OF ADULT BIRDS FROM SUITABLE NEST SITES ON OR WITHIN A STRUCTURE BY THE PLACEMENT OF WEATHER-RESISTANT POLYPROPYLENE NETTING WITH 0.25-INCH OR SMALLER OPENINGS, PRIOR TO MARCH 1. METHODS OTHER THAN NETTING MUST BE PRE-APPROVED BY THE ODOT BIOLOGIST.

CULTURAL RESOURCES AVOIDANCE NOTE:
LOCATIONS OUTSIDE THE PROJECT AREA IN THE FOLLOWING AREA MUST NOT BE UTILIZED FOR BORROW, EQUIPMENT STAGING, HAUL ROADS, SPOIL DUMPS OR ANY OFF-SITE PROJECT-RELATED ACTIVITY.

T3N R17E
- SECTION 26: NW¼ SW¼
- SECTION 27: SW¼ NW¼
  - NE¼ SE¼
  - NE¼ SW¼
- SECTION 34: SW¼ NE¼
- SECTION 35: SE¼ NW¼
  - SW¼ NE¼
  - NW¼ NE¼

ENVIRONMENTAL MITIGATION NOTES

RECREATIONAL AREA MITIGATION NOTE:
THE TEMPORARY RIGHT-OF-WAY LOCATED ON THE OPTIMA WILDLIFE MANAGEMENT AREA WILL BE FULLY RESTORED AND WILL BE GRADED APPROPRIATELY FOR DRAINAGE. A NATIVE SEEDING MIXTURE AND A COVERCROP OF A COOL SEASON ANNUAL GRASS APPROVED BY THE NATURAL RESOURCES CONCESERVATION SERVICE (NRCS) WILL BE APPLIED ACCORDING TO THE SPECIAL PROVISION 233-2(A-B)19. THE APPROVED NATIVE GRASS SEED MIX APPLICATION SHALL OCCUR FROM NOVEMBER TO FEBRUARY, ANY CHANGES TO THE SEED MIXTURE SHALL BE REVIEWED BY ENVIRONMENTAL PROGRAMS DIVISION.

APPROVED NATIVE GRASS SEED MIX		FULL PLS SEED RATE	% OF MIX	PLS PER ACRE	TOTAL PLS LBS.
REQUIRED GRASSES:	Adapted Varieties				
LITTLE BLUESTEM	CIMARRON	5	15%	0.75	0.8
SAND BLUESTEM	CHET	7	30%	2.10	2.1
SWITCHGRASS	BLACKWELL CADDO	3	10%	0.30	0.3
INDIANGRASS	CHEYENNE	7	10%	0.70	0.7
SAND LOVEGRASS		1	10%	0.10	0.1
SIDEOATS GRAMA	EL RENO	5	5%	0.25	0.3
BLUE GRAMA	LOVINGTON	2	5%	0.10	0.1
SAND DROPSEED	BORDEN COUNTY	2	8%	0.16	0.2
FORBS					
UPRIGHT PRAIRIE CONEFLOWER		3	2%	0.06	0.1
LEGUMES					
LEADPLANT		4	5%	0.20	0.2
TOTAL SEED MIX:		*****	100%	4.72	4.7

COOL SEASON ANNUAL GRASS	APPLICATION	% OF MIX
WESTERN WHEAT GRASS	PER MANANUFACTURES RECOMMENDATIONS FOR SITE REQUIREMENTS	100%

ENVIRONMENTAL NOTES

DETAIL		
REVIEW		
APPROVED		

ENVIRONMENTAL DIVISION

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 33323(04) | SHEET NO. AE01

CEC // TRANSPORTATION

REVISIONS

	DESCRIPTION	DATE
1	ADD NOTE-UPDATED QUANTITY	12/22/2023

GENERAL CONSTRUCTION NOTES

IN ACCORDANCE WITH THE OKLAHOMA UNDERGROUND FACILITIES DAMAGE PREVENTION ACT THE CONTRACTOR SHALL NOTIFY THE OKLAHOMA ONE-CALL SYSTEM, INC. 48 HOURS PRIOR TO BEGINNING EXCAVATION. OKLAHOMA ONE-CALL SYSTEM, INC. "CALL OKIE" 1-800-522-6543 OR 811.

FOR PROJECTS THAT INCLUDE WIDENING AND/OR RESURFACING, THE CONTRACTOR SHALL SCHEDULE OPERATIONS TO MINIMIZE POTENTIAL DROP-OFF HAZARDS AND SHALL SUBMIT A SEQUENCE OF CONSTRUCTION OPERATIONS TO THE RESIDENT ENGINEER FOR APPROVAL BEFORE OPERATIONS BEGIN. ANY PORTION OF THE CONSTRUCTION OPERATIONS, SUCH AS SUPERPAVE LAYING OPERATIONS, EXCAVATION FOR PAVEMENT WIDENING, OR EXTENSION OF ROADWAY STRUCTURES, SHALL BE LIMITED TO ONE SIDE AT A TIME, AND THE PROCEDURES OUTLINED IN THE PAVEMENT DROP-OFF TREATMENT STANDARD PDT-1 (LATEST REVISION) SHALL BE IMPLEMENTED. ONLY THAT AMOUNT OF OPEN TRENCH WILL BE ALLOWED THAT CAN BE SURFACED IN 1 (ONE) DAY'S TIME WITHOUT APPROVAL BY THE ENGINEER. LIGHTS, SIGNS AND BARRICADES SHALL BE MOVED AS WORK PROGRESSES.

ALL TREES, BRUSH, AND OTHER DEBRIS THAT MIGHT INTERFERE WITH THE FLOW OF WATER SHALL BE CLEANED OUT TO THE RIGHT-OF-WAY LINE, AT EACH STRUCTURE AND BRIDGE, IN A MANNER APPROVED BY THE ENGINEER. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY RIGHT-OF-WAY FENCE AS REQUIRED. WHEN THE PORTION OF THE PROJECT THAT REQUIRED THIS FENCE IS COMPLETED, THE TEMPORARY FENCE SHALL BE REMOVED, AND PERMANENT RIGHT-OF-WAY FENCING SHALL BE RESTORED OR INSTALLED IN A MANNER APPROVED BY THE ENGINEER. ALL COST TEMPORARY FENCING SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

ALL FLOWLINES THAT ARE TO BE FILLED SHALL BE THOROUGHLY TAMPED BEFORE CONSTRUCTION OR EXTENSION OF DRAINAGE STRUCTURES. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

IN ORDER TO ALLEVIATE DUST CONDITIONS DURING GRADING OPERATIONS AND BEFORE PAVEMENT WORK IS COMPLETED, THE CONTRACTOR SHALL SPRINKLE GRADING AT INTERVALS APPROVED BY THE ENGINEER. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

THE CONTRACTOR SHALL NOT WASTE ANY EXCESS EXCAVATION UNTIL ALL PLANNED EMBANKMENTS AND BACKFILLS ARE COMPLETED. EXCESS UNCLASSIFIED EXCAVATION MATERIAL DETERMINED BY THE ENGINEER TO BE SUITABLE FOR BACKFILL SHALL BE USED TO REDUCE ANY UNCLASSIFIED BORROW NEEDED. COST OF SECOND HANDLING SHALL BE INCLUDED IN OTHER ITEMS OF WORK. ANY REMAINING EXCESS EXCAVATION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

PRIME COAT SHALL BE APPLIED TO THE SUBGRADE IMMEDIATELY AFTER FINAL COMPACTION AND SHAPING TO RETAIN MOISTURE FOR PROPER CHEMICAL REACTION OF THE SOIL ADDITIVE.

THE CONTRACTOR SHALL KEEP THE OPEN TRENCH DRAINED. COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

VEGETATIVE MULCHING: THE VEGETATIVE MULCH SHALL BE ANCHORED IN ACCORDANCE WITH THE "ADHESIVE SPRAY METHOD", AS SPECIFIED IN 233.04B(1) OF THE STANDARD SPECIFICATIONS.

AT THE BEGINNING OF TURFING OPERATIONS, ANY AREAS INCLUDED IN PLANNED QUANTITIES THAT HAVE GROWN A SATISFACTORY VOLUNTEER TURF OF PERENNIAL GRASS, AS DETERMINED BY THE ENGINEER, SHALL BE FERTILIZED AND WATERED AS CALLED FOR ON THE PLANS, BUT SHALL NOT BE SEEDED, SODDED, OR SPRIGGED.

T.B.S.C. SURFACES SHALL BE SPRINKLED WITH WATER AND ROLLED WITH A PNEUMATIC ROLLER IN A MANNER APPROVED BY THE ENGINEER.

EXCESS ASPHALT AT JOINTS AND CRACKS IN EXISTING PAVEMENT SHALL BE REMOVED FLUSH TO TOP OF PAVING IN A MANNER APPROVED BY THE ENGINEER.

ROADWAY PAY QUANTITY NOTES

(R-1) PAYMENT FOR THIS ITEM WILL BE BASED ON PLAN QUANTITY ONLY. SEE SECTION 109.01B OF THE STANDARD SPECIFICATIONS.

(R-4) AN ESTIMATED QUANTITY OF 7,715 C.Y. TOPSOIL TO BE RESERVED FOR REPLACEMENT OF APPROXIMATELY 5" ON COMPLETED FORESLOPES, DITCHES, AND BACKSLOPES. THIS QUANTITY IS INCLUDED IN THE EARTHWORK BALANCE. ANY ADDITIONAL EXCAVATION REQUIRED IN CUT SECTIONS TO ALLOW FOR PLACEMENT OF TOPSOIL TO FINAL GRADE, SHALL BE INCLUDED IN THE PRICE BID.

(R-6) FOR 230(A) SOLID SLAB SODDING PRICE BID TO INCLUDE COST OF 10-20-10 FERTILIZER, ESTIMATED AT 200 POUNDS PER 1000 SQUARE YARDS.

(R-7) FOR 230(A) SOLID SLAB SODDING PRICE BID TO INCLUDE COST OF WATERING, ESTIMATED AT 80 GALLONS PER SQUARE YARD.

(R-8) PRICE BID TO INCLUDE COST OF ALL NECESSARY MAINTENANCE, MAINTAINING DEVICE IN PROPER UPRIGHT POSITION, REMOVAL OF DEVICE, AND REMOVAL OF SEDIMENT WHEN IT REACHES HALF THE HEIGHT OF THE DEVICE.

(R-11) THE QUANTITY ESTIMATED FOR TEMPORARY EROSION AND SEDIMENT CONTROL IS 13.00 ACRES. 1

(R-23) PRIME COAT SHALL BE APPLIED AT AN ESTIMATED RATE OF 0.35 GAL. PER SQ. YD. WHEN APPLIED TO SUBGRADE, AND 0.25 GAL. PER SQ. YD. WHEN APPLIED TO AGGREGATE BASE. THE ACTUAL CUTBACK PRIME COAT REQUIRED FOR PLACEMENT OPERATIONS WILL BE DETERMINED BY THE CONTRACTOR, AND SHALL CONSIDER THE RESIDUE FROM DISTILLATION PERCENTAGE SHOWN IN SECTION 708.03 OF THE STANDARD SPECIFICATIONS.

(R-25) ESTIMATED AT 0.075 GALLONS PER SQUARE YARD OF ORIGINAL EMULSION OF TACK COAT (BEFORE DILUTION FOR APPLICATION) IN ACCORDANCE WITH SECTION 407 OF THE STANDARD SPECIFICATIONS.

(R-26) ESTIMATED AT 112 LBS. PER SQ. YD. PER 1" THICK.

(R-29) PRICE BID TO INCLUDE COST OF FOG SEAL, MEETING THE REQUIREMENTS OF SECTION 407 OF THE STANDARD SPECIFICATIONS.

(R-33) QUANTITY INCLUDES AN ESTIMATED 10.00 C.Y. TO BE USED AS DIRECTED BY THE ENGINEER.

(R-39) 1 INCLUDES REMOVAL OF ALL EXISTING ROADWAY DRAINAGE STRUCTURES, HEADWALLS (UNLESS OTHERWISE SPECIFIED), INLETS, FENCES, AND OTHER STRUCTURES WITHIN THE RIGHT OF WAY.

(R-40) TO BECOME THE PROPERTY OF AND BE DISPOSED OF BY THE CONTRACTOR IN A MANNER APPROVED BY THE ENGINEER.

(R-41) MATERIALS REMOVED SHALL NOT BE MEASURED FOR PAYMENT UNDER SECTION 202.06 UNCLASSIFIED EXCAVATION.

J.P. NO. 33323(04)
0100

PAY QUANTITIES

ROADWAY

ITEM		DESCRIPTION	UNIT	QUANTITY
201(A)	1200	CLEARING AND GRUBBING (1)	L.SUM	1.00
202(A)	2200	UNCLASSIFIED EXCAVATION (R-1)	CY	39,022.00
202(D)	2500	UNCLASSIFIED BORROW	CY	98,770.00
205(A)	6200	TYPE A-SALVAGED TOPSOIL (R-4)	L.SUM	1.00
221(B)	2300	TEMPORARY SILT FENCE (R-8)	LF	8,772.00
221(E)	2600	TEMPORARY SILT DIKE (R-8)	LF	182.00
230(A)	7200	SOLID SLAB SODDING (R-6)(R-7)	SY	55,549.00
233(A)	0200	VEGETATIVE MULCHING (R-11)	AC	26.00
233(E)	0600	(SP) HYDROMULCH (10)	SY	581.00
307(K)	4200	STABILIZED SUBGRADE (6)(7)(8)(9)(R-1)	SY	6,824.00
407(B)	7300	TACK COAT (R-25)	GAL.	1,361.00
408	8100	PRIME COAT (R-23)	GAL.	1,787.00
411(B)	1330	SUPERPAVE, TYPE S3 (PG 64-22 OK) (R-26)	TON	1,709.00
411(C)	1430	SUPERPAVE, TYPE S4 (PG 64-22 OK) (R-26)	TON	1,694.00
412	3100	COLD MILLING PAVEMENT (2)(R-29)	SY	7,828.00
509(D)	0500	CLASS C CONCRETE (3)(R-33)	CY	10.00
613(B)	5516	24" CORR. GALV. STEEL PIPE (R-40)	LF	78.00
613(B)	5528	36" CORR. GALV. STEEL PIPE (R-40)	LF	402.00
619(A)	6200	REMOVAL OF STRUCTURES & OBSTRUCTIONS (4)(R-39)(R-40)(R-41)	L.SUM	1.00
619(B)	6364	REMOVAL OF ASPHALT PAVEMENT (5)(R-40)(R-41)	SY	4,232.00
619(B)	6396	REMOVAL OF GUARDRAIL (R-40)(R-41)	LF	6,979.00
619(B)	6440	REMOVAL OF EXISTING PIPE (R-40)(R-41)	LF	480.00
623(A)	1200	BEAM GUARDRAIL W-BEAM SINGLE	LF	500.00
623(G)	1800	GUARDRAIL END TREATMENT (GET)	EA	4.00
623(I)	2050	GUARDRAIL BRIDGE CONN-THRIE BEAM (31")	EA	4.00

ROADWAY SPECIAL PAY ITEM NOTES

(1) ALL TREE REMOVAL TO BE INCLUDED IN PRICE BID FOR CLEARING AND GRUBBING EVEN WHEN TREES ARE NOT SHOWN ON THE PLANS. SEE ENGINEER BEFORE REMOVING ANY TREES.

(2) COLD MILLINGS TO BECOME PROPERTY OF THE STATE AND SHALL BE STOCKPILED BY THE CONTRACTOR AT A SITE APPROXIMATELY 4 MILES SOUTH OF THE PROJECT.

(3) ESTIMATED QUANTITY. TO BE USED IF AND AS DIRECTED BY THE ENGINEER.

(4) PRICE BID INCLUDES REMOVAL OF EXISTING SOUTH BRIDGE ABUTMENT FOR CONSTRUCTION OF SHOO-FLY.

(5) PRICE BID INCLUDES SAW CUTTING WHERE CALLED FOR ON PLANS OR AS NECESSARY FOR NEAT EDGE.

(6) INCLUDES COST OF THE CHEMICAL ADDITIVE TO ACHIEVE THE RATE SPECIFIED FOR THE APPROPRIATE SOIL CLASSIFICATION AS SPECIFIED IN THE MOST CURRENT ODOT MATERIALS DIVISION OHD L-50.

(7) A TIME PERIOD OF 1 TO 4 DAYS, OR AS DIRECTED BY THE ENGINEER. TO ALLOW FOR COMPLETION OF THE SOIL/CHEMICAL REACTION IN ORDER TO REDUCE THE POTENTIAL EFFECTS OF SULFATE INDUCED HEAVE. SUBGRADE STABILIZATION SHOULD BE CONDUCTED USING A MIXING MOISTURE CONTENT OF AT LEAST 2% ABOVE OPTIMUM.

(8) CONTRACTOR IS RESTRICTED FROM INCORPORATING ANY BORROW SOIL CONTAINING GYPSUM INTO THE GRADING SECTION.

(9) MIXING WATER FOR USE IN SUBGRADE STABALIZATION IS TO BE TESTED FOR SULFATES.

(10) SEE THE RECREATIONAL AREA MITIGATION NOTE ON SHEET AE01.

SH-94 TEXAS COUNTY

SUMMARY OF PAY ITEMS & NOTES (ROADWAY)

JOB PIECE NO. 33323(04) SHEET NO. AR01

CEC // TRANSPORTATION

REVISIONS	
DESCRIPTION	DATE

SUMMARY OF SURFACING

ALIGNMENT	STATION TO STATION	STABILIZED SUBGRADE 307(K) SY	TACK COAT 407(B) GAL.	PRIME COAT 408 GAL.	SUPERPAVE, TYPE S3 (PG 64-22 OK) 411(B) TON	SUPERPAVE, TYPE S4 (PG 64-22 OK) 411(C) TON	* COLD MILLING PAVEMENT 412 SY
SH-94 (MAINLINE)							
CLS SH-94	164+35.71 TO 175+00.00		205.00			318.00	2,739.00
CLS SH-94	175+00.00 TO 177+50.00		49.00			75.00	650.00
CLS SH-94	177+50.00 TO 181+52.70	1,932.00	267.00	483.00	614.00	202.00	
CLS SH-94	185+44.36 TO 189+50.00	1,946.00	267.00	487.00	619.00	203.00	
CLS SH-94	189+50.00 TO 190+00.00		10.00			15.00	129.00
CLS SH-94	190+00.00 TO 205+00.00		291.00			448.00	3,880.00
CLS SH-94	205+00.00 TO 206+66.00		32.00			50.00	430.00
SH-94 (GUARDRAIL WIDENING)							
CLS SH-94	178+94.70 TO 181+52.70		6.00	21.00		19.00	
CLS SH-94	179+19.44 TO 181+52.70		6.00	19.00		17.00	
CLS SH-94	185+44.36 TO 187+77.51		6.00	19.00		17.00	
CLS SH-94	185+44.36 TO 188+02.51		6.00	21.00		19.00	
DETOUR SHOO-FLY							
CRL DETOUR SHOO-FLY	174+36.37 TO 185+00.00	1,819.00	133.00	455.00	296.00	193.00	
CRL DETOUR SHOO-FLY	185+00.00 TO 192+10.98	1,127.00	83.00	282.00	180.00	118.00	
	TOTALS	6,824.00	1,361.00	1,787.00	1,709.00	1,694.00	7,828.00

SUMMARY OF REMOVALS

ALIGNMENT	STATION TO STATION	DESCRIPTION	REMOVAL OF STRUCTURES & OBSTRUCTIONS 619(B) L.SUM	REMOVAL OF ASPHALT PAVEMENT 619(B) SY	REMOVAL OF GUARDRAIL 619(B) LF	REMOVAL OF EXISTING PIPE 619(B) LF
SH-94 (MAINLINE)						
CLS SH-94	164+35.71 TO 170+00.00	GUARDRAIL 16' LT. & 16' RT.			1,128.00	
CLS SH-94	170+00.00 TO 185+00.00	GUARDRAIL 16' LT. & 16' RT., FULL DEPTH REMOVAL		960.00	2,224.00	
CLS SH-94	185+00.00 TO 200+00.00	GUARDRAIL 16' LT. & 16' RT., FULL DEPTH REMOVAL		296.00	2,317.00	
CLS SH-94	200+00.00 TO 206+66.00	GUARDRAIL 16' LT. & 16' RT.			1,310.00	
DETOUR SHOO-FLY						
CRL DETOUR SHOO-FLY	174+36.37 TO 185+00.00	TEMPORARY PIPE REMOVAL, SHOO-FLY REMOVAL		1,809.00		480.00
CRL DETOUR SHOO-FLY	185+00.00 TO 192+10.98	SHOO-FLY REMOVAL		1,167.00		
CRL DETOUR SHOO-FLY	182+22.28	BRIDGE ABUTMENT	1.00			
		TOTALS	1.00	4,232.00	6,979.00	480.00

SUMMARY OF TEMPORARY SEDIMENT CONTROLS

SHEET NO.	ALIGNMENT	STATION TO STATION	TEMPORARY SILT FENCE 221 (C) LF	(1) TEMPORARY SILT DIKE 221 (E) LF	(2) VEGETATIVE MULCHING 233(A) AC
R002	CRL DETOUR SHOO-FLY	174+36.00 TO 185+00.00	1,315.00	28.00	
R002	CRL DETOUR SHOO-FLY	174+36.00 TO 192+11.00	1,205.00		
R003	CLS SH-94	177+50.00 TO 185+00.00	826.00		
R003	CLS SH-94	185+00.00 TO 189+50.00	526.00		
R004	CLS SH-94	164+35.71 TO 170+00.00	1,144.00		2.00
R004	CLS SH-94	170+00.00 TO 185+00.00	1,331.00	42.00	10.00
R005	CLS SH-94	185+00.00 TO 200+00.00	1,083.00	112.00	11.00
R005	CLS SH-94	200+00.00 TO 206+66.00	1,342.00		3.00
		TOTALS	8,772.00	182.00	26.00

(1) SILT DIKES ESTIMATED AT 14 LF EACH.
(2) QUANTITY INCLUDES TO APPLICATIONS.

SCHEDULE OF EARTHWORK

ALIGNMENT	STATION TO STATION	UNCLASSIFED EXCAVATION 202(A) CY	EMBANKMENT +15% CY	UNCLASSIFIED BORROW 202(D) CY	EXCESS EXCAVATION CY
SH 94 - DETOUR SHOO-FLY CONSTRUCTION - PHASE 1					
CLS SH 94	174+43.79 TO 192+02.19	2,010.00	46,855.00	44,845.00	
SH 94 - FULL DEPTH CONSTRUCTION - PHASE 2					
CLS SH 94	177+00.00 TO 190+00.00	384.00	37,967.00	37,583.00	
SH 94 - COLDMILLING / SLOPE GRADING - PHASE 3					
CLS SH 94	164+35.71 TO 206+66.00	280.00	16,622.00	16,342.00	
SH 94 - COLDMILLING / SLOPE GRADING - PHASE 4					
CLS SH 94	164+35.71 TO 206+66.00	36,348.00	15,083.00		21,265.00
	TOTALS	39,022.00	116,527.00	98,770.00	21,265.00

SUMMARY OF PERMANENT EROSION CONTROL

SHEET NO.	ALIGNMENT	STATION TO STATION	SOLID SLAB SODDING 230(A) SY
R004	CLS SH-94	164+35.71 TO 170+00.00	4,857.00
R004	CLS SH-94	170+00.00 TO 185+00.00	19,997.00
R005	CLS SH-94	185+00.00 TO 200+00.00	24,376.00
R005	CLS SH-94	200+00.00 TO 206+66.00	6,319.00
		TOTALS:	55,549.00

SUMMARY OF GUARDRAIL

ALIGNMENT	STATION TO STATION			TOTAL PANEL LENGTH INCLUDING ANCHOR UNITS * LF	BEAM GUARDRAIL W-BEAM SINGLE 623(A) LF	GUARDRAIL END TREATMENT (GET) 623(G) EA.	GUARDRAIL BRIDGE CONN-THRIE BEAM(31") 623(I) EA.	DELINEATORS (TYPE 2, CODE 1) 853 EA.
				LT.	RT.			
CLS SH-94	179+72.05 TO 181+53.30			X		181.25	112.5	1	1	4
CLS SH-94	179+47.05 TO 181+53.30				X	206.25	137.5	1	1	5
CLS SH-94	185+43.76 TO 187+50.01			X		206.25	137.5	1	1	5
CLS SH-94	185+43.76 TO 187+25.01				X	181.25	112.5	1	1	4
			TOTALS				500.00	4.00	4.00	18.00

* NON PAY ITEM. QUANTITY INCLUDED FOR INFORMATIONAL PURPOSES ONLY.

SUMMARY OF TEMPORARY DRAINAGE STRUCTURES

STR.	ALIGNMENT	STATION	DESCRIPTION	CGSP 24" 613(B) LF	CGSP 36" 613(B) LF
T1	CRL DETOUR SHOO-FLY	180+00.22	CONST. 24" X 78' LG. CGSP, 42.62' LG. RT. & 34.48' LG. LT.	78.00	
T2	CRL DETOUR SHOO-FLY	184+35.01	CONST. 3 - 36" X 134.0' LG. CGSP, SKEW 35° LT. FWD. 55.33' LG. LT. & 78.66' LG. RT.		402.00
			TOTALS	78.00	402.00

SH-94 TEXAS COUNTY

SUMMARY SHEET (ROADWAY)

JOB PIECE NO. 33323(04) SHEET NO. AR02

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TRAFFIC GENERAL CONSTRUCTION NOTES

REMOVED MATERIAL TO BECOME PROPERTY OF CONTRACTOR AND IT SHALL BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

ANY DAMAGE CAUSED BY THE CONTRACTOR TO ANY STRUCTURES, ROADWAY SURFACES, STRIPING, RAISED PAVEMENT MARKERS, GUARDRAIL, SLOPES, AND SIGNS SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER.

THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING TRAFFIC ON CROSS STREETS. A MINIMUM OF ONE LANE IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES. SEE O.D.O.T. STANDARDS AND DETAIL DRAWINGS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.

ALL REGULATORY SIGNS SHALL HAVE HIGH INTENSITY SHEETING. THE HIGH INTENSITY SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION) FOR TYPE IV SHEETING.

ALL WARNING SIGNS SHALL HAVE FLUORESCENT YELLOW SHEETING. THE FLUORESCENT YELLOW SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION) REQUIREMENTS FOR TYPE XI SHEETING.

ALL GREEN AND BLUE SIGNS ON CONVENTIONAL HIGHWAYS SHALL HAVE HIGH INTENSITY SHEETING. THE HIGH INTENSITY SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION) FOR TYPE IV SHEETING.

POST LENGTHS SHOWN ON SIGN SUMMARY ARE APPROXIMATE, EXACT LENGTH SHALL BE DETERMINED BY FIELD SURVEY BY THE CONTRACTOR.

ALL REMOVED SIGNS, SIGN POSTS, BOLTS, MISCELLANEOUS HARDWARE, AND DELINEATORS SHALL REMAIN THE PROPERTY OF THE STATE. THE CONTRACTOR SHALL NEATLY STACK SUCH REMOVED MATERIAL AT A LOCATION ON THE JOB SITE AS DESIGNATED BY THE ENGINEER UNTIL SUCH TIME AS DIVISION PERSONNEL CAN REMOVE THE MATERIAL FROM THE JOB SITE.

THE MANUFACTURER SHALL FURNISH A TYPE 'A' CERTIFICATION IN ACCORDANCE WITH ODOT STANDARD SPECIFICATIONS, LATEST EDITION, SUBSECTION 106.04. THE CERTIFICATION SHALL INCLUDE TEST RESULTS ON THE MATERIAL SUBMITTED FOR APPROVAL.

ALL BROKEN CONCRETE INCLUDING OLD SIGN FOOTINGS WITH STUBS, WASTE MATERIAL AND DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE LIMITS OF THE PROJECT AND DISPOSED OF IN AN AREA APPROVED BY THE ENGINEER. NO PAYMENT SHALL BE MADE FOR THE DISPOSAL OF THIS MATERIAL. ANY PIPE POST OR WIDE FLANGE POST ABOVE THE OLD SIGN FOOTINGS SHALL BE CUT AND HANDLED AS PROPERTY OF THE STATE AND SHALL BE NEATLY STACKED ON THE JOB SITE, AS DESIGNATED BY THE ENGINEER UNTIL SUCH TIME AS DIVISION PERSONNEL CAN REMOVE THE MATERIAL FROM THE JOB SITE.

THE STATIONS AND LOCATIONS OF THE SIGN PLACEMENT, AS SHOWN ON THE PLAN SHEETS, ARE APPROXIMATE. EXACT STATIONS AND LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR SO THAT THE SIGN IS INSTALLED IN ACCORDANCE WITH DEPARTMENT STANDARDS AND THE MUTCD IN ORDER TO PROVIDE OPTIMUM VISIBILITY TO THE ONCOMING/APPROACHING MOTORIST. IF A PROPOSED LOCATION CONFLICTS WITH OTHER SIGNS, UTILITIES OR OTHER ROADWAY FEATURES, THE ENGINEER SHALL BE NOTIFIED.

ANY SIGNS AND/OR DELINEATORS WHICH ARE TO BE REMOVED DURING THIS PROJECT WILL BE STORED IN A PROTECTED AREA DESIGNATED BY THE RESIDENT ENGINEER, UNTIL SUCH A TIME THAT THEY ARE TO BE RESET BY THE CONTRACTOR. COST OF THIS WORK TO BE INCLUDED IN OTHER ITEMS OF WORK.

EXISTING ROADWAY SHALL REMAIN OPEN DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER BARRICADES, LIGHTS, AND SIGNING WITHIN THE LIMITS OF CONSTRUCTION. ALL CONSTRUCTION SIGNING WILL BE IMPLEMENTED ACCORDING TO CONSTRUCTION PLANS. CONSTRUCTION TRAFFIC CONTROL WILL BE INSTALLED IN A MANNER APPROVED BY THE ENGINEER, IN ACCORDANCE WITH CHAPTER VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (CURRENT EDITION), AND COMPLIANT WITH APPLICABLE O.D.O.T. STANDARD DRAWINGS.

TEMPORARY TRAFFIC PAY ITEM NOTES

(TC-1) THE CONTRACTOR SHALL INSTALL SUCH LIGHTS, SIGNS, BARRICADES, AND PROVIDE FLAGGERS NECESSARY FOR THE CONTROL, SAFETY, AND MAINTENANCE OF TRAFFIC WHEN INSTALLING, RELOCATING, OR DELIVERING PORTABLE LONGITUDINAL BARRIER.

(TC-2) QUANTITY INCLUDES SUFFICIENT LENGTH OF PORTABLE LONGITUDINAL BARRIER TO PROVIDE FOR THE LONGEST SECTION SHOWN ON THE PLANS. THIS SAME BARRIER WILL BE USED ON OTHER DETOUR PHASES.

(TC-19) THIS ITEM INCLUDES AN ESTIMATED 16,743 L.F. (4" WIDE) WHITE AND 8,000 L.F. (4" WIDE) YELLOW STRIPE. THE CONTRACTOR SHALL PROVIDE AND INSTALL AN O.D.O.T. APPROVED REMOVABLE PAVEMENT MARKING TAPE. COST FOR REMOVAL OF THIS TAPE SHALL BE INCLUDED IN THE PRICE BID FOR THIS ITEM. NON-REMOVABLE MARKING TAPE (FOIL BLACK) SHALL NOT BE CONSIDERED AN APPROVED EQUAL FOR THIS ITEM.

(TC-21) INCLUDED IN THE COST OF THIS ITEM SHALL BE INSTALLATION, MAINTENANCE, AND REMOVAL. THIS ITEM SHALL BE BID ACCORDINGLY.

(TC-26) ALL CONSTRUCTION TRAFFIC CONTROL WILL BE IMPLEMENTED ACCORDING TO CONSTRUCTION PLANS, AND INSTALLED IN A MANNER APPROVED BY THE ENGINEER, IN ACCORDANCE WITH CHAPTER VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (CURRENT EDITION), AND COMPLIANT WITH APPLICABLE O.D.O.T. STANDARD DRAWINGS. PRICE BID FOR THIS ITEM SHALL BE PAYMENT IN FULL FOR THE INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF ALL NECESSARY CONSTRUCTION TRAFFIC CONTROL DEVICES REQUIRED FOR COMPLETION OF THE PROJECT.

ALL SIGNS AND BARRICADES, WHICH ARE SHOWN WITH TYPE 'A' LIGHTS IN THE STANDARD DRAWINGS SHALL HAVE THE CORRESPONDING LIGHT ATTACHED DURING NON-DAYLIGHT HOURS.

TEMPORARY TRAFFIC PAY ITEM NOTES-CONT.

(TC-28) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE BETWEEN 0.00 S.F. AND 6.25 S.F. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS.

(TC-29) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE BETWEEN 6.26 S.F. AND 15.99 S.F. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS.

(TC-30) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE BETWEEN 16.00 S.F. AND 32.99 S.F. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS.

(TC-33) ALL CONSTRUCTION WORK ZONE SIGNS SHALL HAVE FLUORESCENT SHEETING. THE FLUORESCENT SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956 (LATEST REVISION)

THE MANUFACTURER SHALL FURNISH A TYPE 'D' CERTIFICATION IN ACCORDANCE WITH O.D.O.T. STANDARD SPECIFICATIONS (CURRENT EDITION) SUBSECTION 06.04. THE CERTIFICATION SHALL INCLUDE TEST RESULTS ON MATERIAL SUBMITTED FOR APPROVAL.

(TC-52) ANY USED PORTABLE CHANGEABLE MESSAGE SIGN AND CONSTRUCTION ZONE IMPACT ATTENUATOR TO BE PLACED ON THIS PROJECT SHALL BE SUBJECT TO INSPECTION AND APPROVAL, BY THE OKLAHOMA DEPARTMENT OF TRANSPORTATION, TO ASSURE THAT THEY ARE IN GOOD WORKING CONDITION, PRIOR TO PLACEMENT ON THE PROJECT.

(TC-61) ANY DAMAGE TO A FINISHED OR EXISTING SURFACE RESULTING FROM THE CONTRACTORS NEGLIGENCE IN THE REMOVAL OF CONSTRUCTION ZONE PAVEMENT MARKERS OR CHANNELIZING DEVICES AND THE BITUMINOUS ADHESIVE USED IN THEIR INSTALLATION, SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE ENGINEER.

(TC-70) THIS ITEM IS AN ESTIMATED QUANTITY TO BE USED AS DEEMED NECESSARY BY THE ENGINEER.

(TC-75) TEMPORARY PAVEMENT MARKINGS SHALL BE IN PLACE THE SAME DAY THAT EXISTING PAVEMENT MARKINGS ARE REMOVED FROM ANY ROADWAY OPEN TO TRAFFIC. ALSO, ALL TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVED PRIOR TO THE INSTALLATION OF FINAL STRIPING.

(TC-80) INCLUDED IN THIS ITEM SHALL BE ONE (1) ADDITIONAL UNIT TO BE USED AS A STAND-BY OR REPLACEMENT. THIS STAND-BY UNIT SHALL BE IMMEDIATELY ACCESSIBLE TO REPLACE A DAMAGED, STOLEN OR MALFUNCTIONING UNIT. THE AMOUNT OF TIME BETWEEN THE REMOVAL OF THE DAMAGED UNIT AND THE INSTALLATION OF THE STAND-BY UNIT SHALL BE NO MORE THAN TWENTY-FOUR (24) HOURS.

(TC-84) 240 CONSTRUCTION CALENDAR DAYS WERE USED TO COMPUTE THE SIGN DAY PAY ITEMS. THE AMOUNT OF CALENDAR DAYS USED TO COMPUTE THE SIGN DAY PAY ITEMS IS AN ESTIMATED QUANTITY ONLY, BASED ON THE CURRENT O.D.O.T. STANDARDS AND SUGGESTED CONSTRUCTION SEQUENCE FOR THIS PROJECT. THESE ESTIMATED SIGN DAY QUANTITIES MAY CHANGE AS THE PROJECT'S CONSTRUCTION TRAFFIC CONTROL IS MODIFIED DURING CONSTRUCTION.

(TC-85) THESE SIGNS MUST BE ON THE OKLAHOMA DEPARTMENT OF TRANSPORTATION LIST OF APPROVED CHANGEABLE MESSAGE SIGNS. FOR A LIST OF THE APPROVED SIGNS GO TO THE OKLAHOMA DEPARTMENT OF TRANSPORTATION WEBSITE AT: http://www.okladot.state.ok.us/traffic/qpl/index.php

TRAFFIC SIGN PAY ITEM NOTES

(TS-25) QUANTITY SHOWN INCLUDES 8,464 L.F. TRAFFIC STRIPE (MULTI-POLYMER)(WHITE) AND 1,059 L.F. TRAFFIC STRIPE (MULTI-POLYMER)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF SIX INCH (6") WIDE TRAFFIC STRIPE.

(TS-33) INCLUDED IN THIS PAY ITEM IS ALL HARDWARE ASSOCIATED WITH PROPERLY ANCHORING AND MOUNTING THE HIGHWAY SIGN IN ACCORDANCE WITH O.D.O.T. PLANS AND STANDARD DRAWINGS SSA1-1 AND SSP1-1-(LATEST REVISION).

(TS-34) INCLUDED IN THIS PAY ITEM IS THE REMOVAL OF ANY EXISTING SIGNS TO BE REPLACED BY NEW ASSEMBLIES AND THE REMOVAL OF ANY EXISTING SIGNS THAT WILL BE IN CONFLICT WITH THE NEW ROADWAY OR NEW SIGNAGE.

(TS-41) "REMOVAL OF EXISTING SIGNS" SHALL INCLUDE THE REMOVAL OF A COMPLETE SIGN ASSEMBLY WHICH MAY INCLUDE MULTIPLE SIGNS, POSTS, FOOTINGS, AND ANY FOOTINGS ADJACENT TO THE SIGN ASSEMBLY. WHEN APPROVED BY THE ENGINEER, FOOTINGS MAY BE OBLITERATED TO A POINT BELOW GROUND LEVEL IN LIEU OF BEING COMPLETELY REMOVED. SEE GENERAL CONSTRUCTION NOTES FOR DISPOSAL OF OLD CONCRETE FOOTING MATERIAL.

CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE

J.P. NO. 33323(04)
0300

PAY QUANTITIES

TRAFFIC TEMPORARY

ITEM		DESCRIPTION		UNIT	QUANTITY
823	6100	(SP) PORTABLE TRAFFIC SIGNAL SYSTEM	(1)(2)(TC-21)(TC-26)(TC-80)(TC-84)	SD	240.00
857(C)	9400	REMOVABLE PAVEMENT MARKING TAPE (4" WIDE)	(TC-19)(TC-61)(TC-70)(TC-75)	LF	24,743.00
857(F)	9700	PAVEMENT MRKNG.REMOVAL(TRAF.STRP)	(TC-22)(TC-61)(TC-70)(TC-75)	LF	4,125.00
858(A)	0224	PAVE.MARKERS CLASS A TYPE 2-C	(TC-21)(TC-61)(TC-70)(TC-75)	EA	1,211.00
858(A)	0228	PAVE.MARKERS CLASS A TYPE 2-D	(TC-21)(TC-61)(TC-70)(TC-75)	EA	200.00
871(B)	2300	CONST. ZONE IMPACT ATTEN.	(3)(TC-52)(TC-80)(TC-84)	SD	240.00
877(B)	4300	DELIVER PORTABLE LONGITUDINAL BARRIER	(TC-1)(TC-2)	LF	1,050.00
880(B)	6300	CONSTRUCTION SIGNS 0 TO 6.25 SF	(TC-26)(TC-28)(TC-33)(TC-84)	SD	4,800.00
880(B)	6310	CONSTRUCTION SIGNS 6.26 SF TO 15.99 SF	(TC-26)(TC-29)(TC-33)(TC-84)	SD	3,560.00
880(B)	6320	CONSTRUCTION SIGNS 16.0 SF TO 32.99 SF	(TC-26)(TC-30)(TC-33)(TC-84)	SD	4,240.00
880(C)	6410	CONSTRUCTION BARRICADES (TYPE III)	(TC-26)(TC-33)(TC-84)	SD	900.00
880(E)	6607	WARNING LIGHTS (TYPE B)	(TC-26)(TC-84)	SD	5,560.00
880(F)	6700	DRUMS	(4)(TC-26)(TC-84)	SD	11,960.00
882(A)	8210	PORT. CHANGEABLE MESSAGE SIGN	(5)(TC-26)(TC-52)(TC-80)(TC-84)(TC-85)	SD	494.00

J.P. NO. 33323(04)
0301

PAY QUANTITIES

TRAFFIC PERMANENT

ITEM		DESCRIPTION		UNIT	QUANTITY
413(A)	4210	RUMBLE STRIP-CENTERLINE HMA-CON		LF	3,839.00
413(B)	4310	RUMBLE STRIP-METHOD HMA-CYC		LF	1,614.00
805(A)	3252	(PL)REMOVAL OF EXISTING SIGNS	(TS-41)	EA	2.00
805(D)	3528	(PL)REMOVE & RESET EXISTING SIGNS		EA	2.00
850(A)	1200	SHEET ALUMINUM SIGNS	(TS-34)	SF	18.00
851(C)	2415	2" SQUARE TUBE POST	(TS-33)	LF	26.00
853	5115	DELINEATORS (TYPE 2, CODE 1)		EA	18.00
856(A)	8204	TRAFFIC STRIPE (MULTI-POLY.)(6" WIDE)	(TS-25)	LF	9,523.00

TRAFFIC SPECIAL PAY ITEM NOTES

(1) PORTABLE TRAFFIC SIGNAL SYSTEM CONTAINS TWO PORTABLE TRAFFIC SIGNALS WITH MULTIPLE HEADS AS SHOWN IN THE PLANS. COST TO INCLUDE ALL LABOR, EQUIPMENT, DELIVERY, INSTALLATION, MAINTENANCE AND REMOVAL AS SHOWN IN CONTRACT UNIT PRICE FOR "(SP) PORTABLE TRAFFIC SIGNAL SYSTEM."

(2) PORTABLE TRAFFIC SIGNAL TO BE ABLE TO DETECT PRESENCE OF STOPPED VEHICLES.

(3) INCLUDES TWO ADDITIONAL ATTENUATORS TO BE USED AS DIRECTED DURING PHASING AND REMOVAL OF EXISTING GUARDRAIL.

(4) TYPE "C" WARNING LIGHTS NOT REQUIRED.

(5) QUANTITY INCLUDES PORTABLE MESSAGE SIGNS TO BE INTIALLY PLACED 7 DAYS PRIOR TO CONSTRUCTION ACTIVITIES FOR ADVANCE INFORMATION ON WORK ZONES AND 14 DAYS PRIOR TO CONSTRUCTION ACTIVITIES FOR DETOURS. SIGNS SHALL BE POSITIONED AT THE DISCRETION OF THE ENGINEER.

SH-94 TEXAS COUNTY

SUMMARY OF PAY ITEMS & NOTES (TRAFFIC)

JOB PIECE NO. 33323(04) SHEET NO. AT01

CEC // TRANSPORTATION

REVISIONS	
DESCRIPTION	DATE

SUMMARY OF SIGNS

STATION	SIDE	SIGN NO.	TYPE OF SIGN	DESCRIPTION	SHEET ALUMINUM SIGN	2" SQUARE TUBE POST	REMOVAL OF EXISTING SIGNS	REMOVE & RESET EXISTING SIGNS
					850(A)	851(C)	805(A)	805(D)
					SF	LF	EA.	EA.
SH-94								
173+78	RT.		EXIST. W8-13	BRIDGE ICES BEFORE ROAD			1.00	
173+78	RT.	1	W8-13E	BRIDGE ICES BEFORE ROAD	9.00	13.00		
181+05	RT.		EXIST. SPECIAL SIGN 1	BEAVER RIVER				1.00
188+50	LT.		EXIST. SPECIAL SIGN 2	BEAVER RIVER				1.00
194+66	LT.		EXIST. W8-13	BRIDGE ICES BEFORE ROAD			1.00	
194+66	LT.	2	W8-13E	BRIDGE ICES BEFORE ROAD	9.00	13.00		
				TOTALS	18.00	26.00	2.00	2.00

SUMMARY OF PAVEMENT MARKING

ALIGNMENT	STATION TO STATION	TRAFFIC STRIPE (MULTI-POLY.) (6"WIDE) WHITE 856(A)	TRAFFIC STRIPE (MULTI-POLY.) (6"WIDE) YELLOW 856(A)
		LF	LF
CLS SH-94	164+35.71 TO 170+00.00	1,130.00	142.00
CLS SH-94	170+00.00 TO 185+00.00	3,000.00	375.00
CLS SH-94	185+00.00 TO 200+00.00	3,000.00	375.00
CLS SH-94	200+00.00 TO 206+66.00	1,334.00	167.00
	TOTAL	8,464.00	1,059.00

SH-94 TEXAS COUNTY

SUMMARY SHEET (TRAFFIC)

JOB PIECE NO. 33323(04) SHEET NO. AT02

N:\OKC\Transportation\Highway\Production\ODOT\200078-ODOT-CI-2223-SH-94 over Beaver River\Project Drawings\General\3332304 - SUMMARY SHEET (TRAFFIC).dwg
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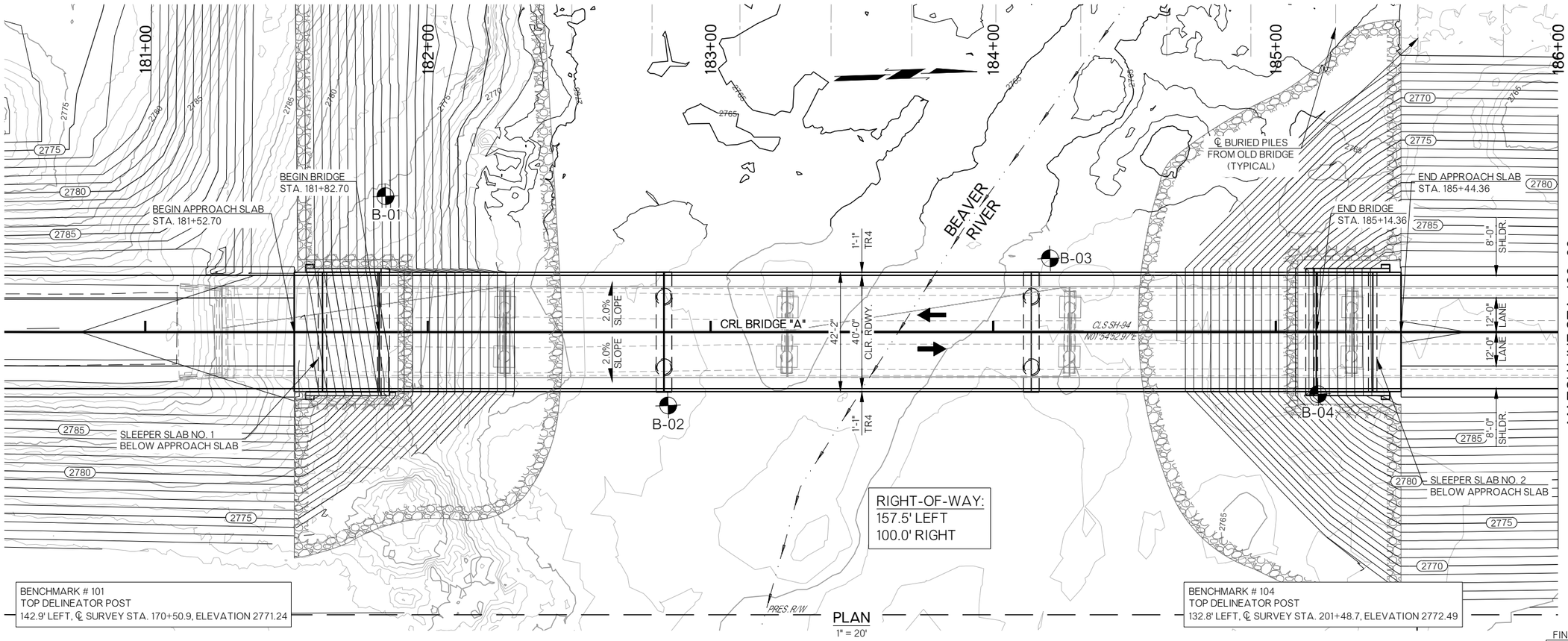
CEC // TRANSPORTATION

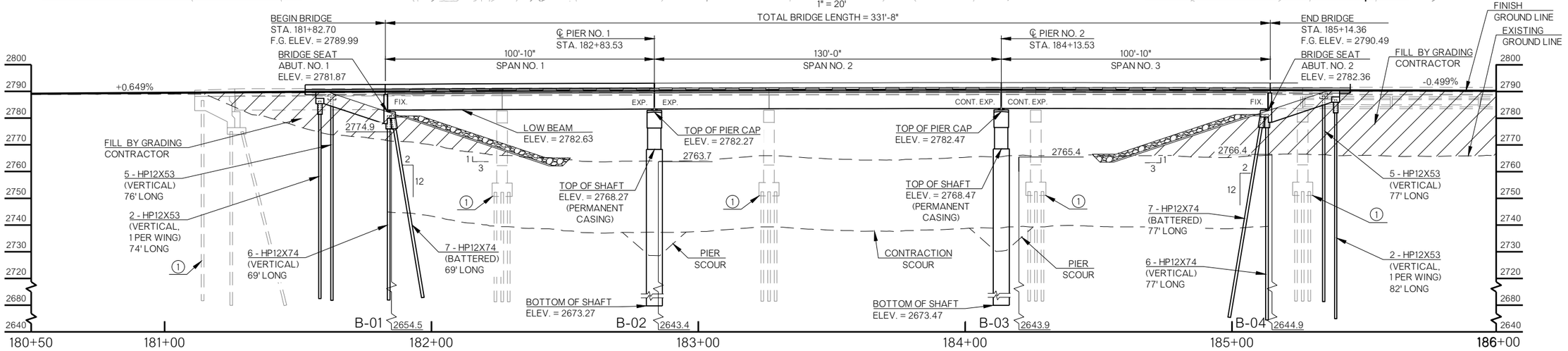
DESCRIPTION	REVISIONS	DATE



BENCHMARK # 101
TOP DELINEATOR POST
142.9' LEFT, ℄ SURVEY STA. 170+50.9, ELEVATION 2771.24

BENCHMARK # 104
TOP DELINEATOR POST
132.8' LEFT, ℄ SURVEY STA. 201+48.7, ELEVATION 2772.49

PLAN
1" = 20'



ELEVATION
1" = 20'

NOTE: ALL STATIONING AND ELEVATIONS ARE ALONG CENTERLINE SURVEY, UNLESS NOTED OTHERWISE.

SEE SHEET B002 FOR DESIGN DATA, INDEX OF BRIDGE SHEETS, LIST OF STANDARDS, UTILITIES AND VERTICAL PROFILE DATA.

NOTE:
FOR RIPRAP EXTENTS AT SPUR DIKE, SEE SHEET R013.

(1) FOUNDATIONS FOR EXISTING BRIDGE SUBSTRUCTURE.

SH-94 OVER BEAVER RIVER
BRIDGE "A"

TEXAS COUNTY

GENERAL PLAN AND ELEVATION (1 OF 3)

100'-130'-100' TYPE J P.C. BEAM SPANS, 0° SKEW,
40'-0" CLR. RDWY. W/ TR4 CONCRETE RAILS, ℄ STA. 183+48.53

DESIGN	JWH	
DETAIL	JFR	
CHECK	EBR	

CEC

STATE OF OKLAHOMA

DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 33323(04)

SHEET NO. B001

N:\OKC\Bridge\Bridge Projects\Production\1 ODOT\200078-ODOT-CI2223-JP#3332304-SH-94 over Beaver River\7 Drawings\DWG Files\B001-B003-3332304-GENERAL PLAN AND ELEVATION.dwg
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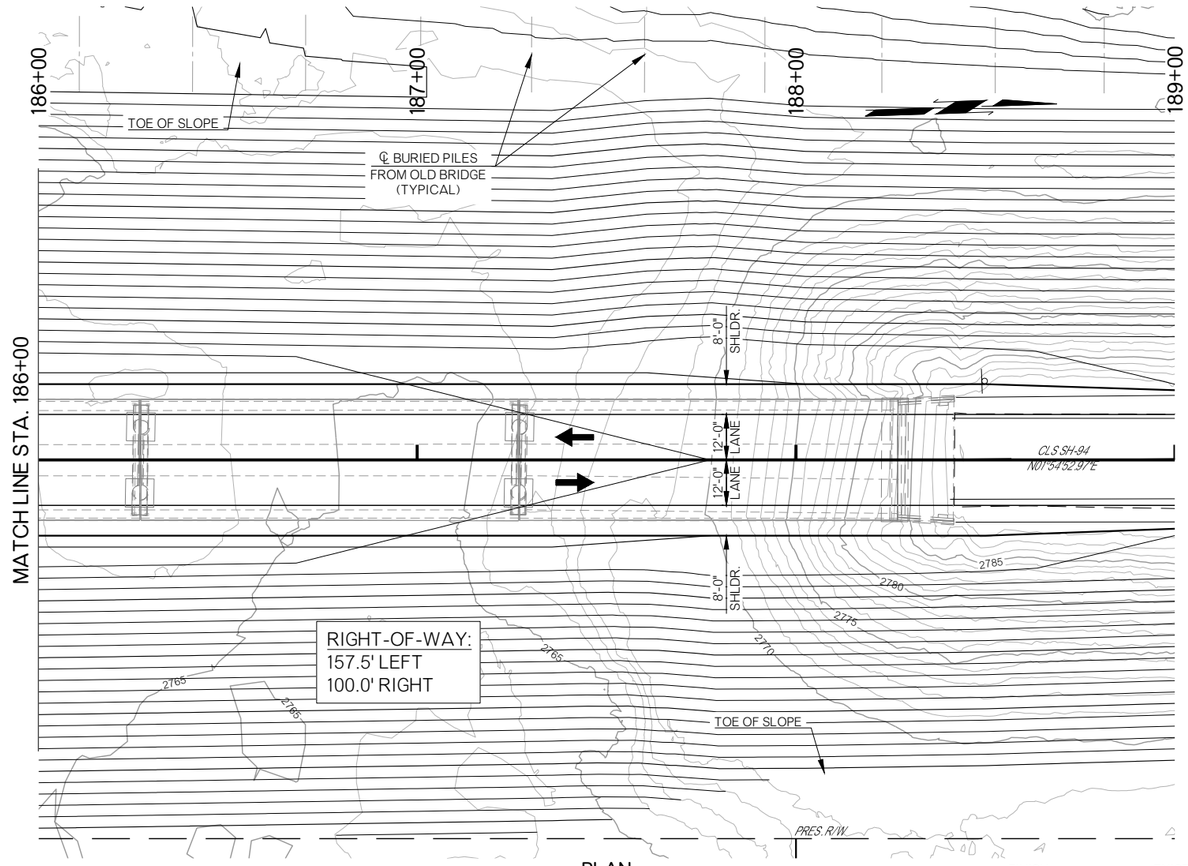
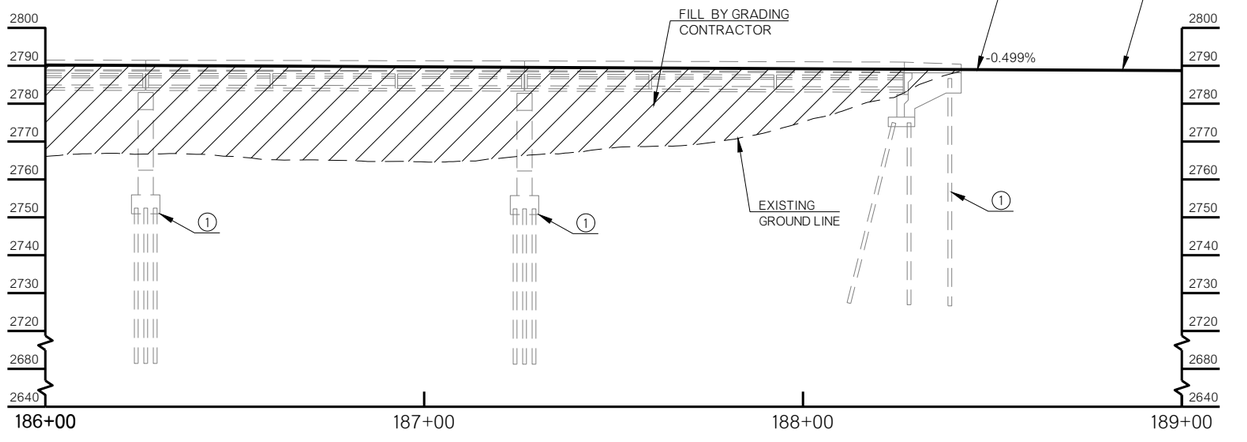


PLAN
1" = 20'



ELEVATION
1" = 20'

① FOUNDATIONS FOR EXISTING BRIDGE SUBSTRUCTURE.

NOTE: ALL STATIONING AND ELEVATIONS ARE ALONG CENTERLINE SURVEY, UNLESS NOTED OTHERWISE.

CEC // TRANSPORTATION

DESCRIPTION	REVISIONS	DATE

DESIGN DATA

LOAD AND RESISTANCE FACTOR DESIGN

CLASS A CONCRETE	f'c = 3 KSI
CLASS AA CONCRETE	f'c = 4 KSI
REINFORCING STEEL (GRADE 60)	fy = 60 KSI
STRUCTURAL STEEL M270 (GRADE 50W)	Fy = 50 KSI
STAINLESS STEEL A240 (TYPE 316)	Fy = 30 KSI

LOADING:
- HL-93 OR OKLAHOMA OVERLOAD TRUCK
- 20 P.S.F. FUTURE WEARING SURFACE
- 5 P.S.F. STAY-IN-PLACE FORMS

DESIGN:
- AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION
- ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE
- ASI/AWS D1.6 STRUCTURAL WELDING CODE - STAINLESS STEEL

HL93 INVENTORY RATING FACTOR: 1.06
HL93 OPERATING RATING FACTOR: 1.93

INDEX OF BRIDGE SHEETS

2009 BRIDGE STANDARDS

TR4-2
EJ-SQ
EJ-DTL
HP1-2
B40-C-TR4-O-1
B40-C-TR4-O-2

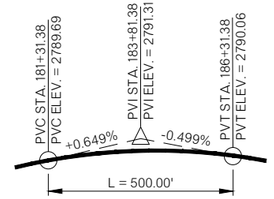
2019 ROADWAY STANDARDS

PUD-4

UTILITIES

PIONEER TELEPHONE COMM. INC.
TIMBERLAND GATHERING AND PROCESSING CO.
TRI COUNTY ELECTRIC COOP

NOTE:
FOR SUMMARY OF BRIDGE QUANTITIES, FOUNDATION DATA, AND HYDRAULIC DATA SEE SHEET B003.



VERTICAL PROFILE DATA
CENTERLINE SURVEY SH-94

SH-94 OVER BEAVER RIVER
BRIDGE "A"
TEXAS COUNTY

GENERAL PLAN AND ELEVATION (2 OF 3)

100'-130'-100' TYPE J P.C. BEAM SPANS, 0° SKEW,
40'-0" CLR. RDWY. W/ TR4 CONCRETE RAILS, ℄ STA. 183+48.53

DESIGN	JWH	
DETAIL	JFR	BFE
CHECK	EBR	

CEC

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 33323(04) — SHEET NO. B002

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CEC // TRANSPORTATION

DESCRIPTION	REVISIONS	DATE

SUMMARY OF BRIDGE QUANTITIES

ITEM	UNIT	ABUTMENTS	PIERS	SUPERSTRUCTURE	APPROACH SLABS	TOTAL
SUBSTRUCTURE EXCAVATION COMMON	C.Y.	210.00	—	—	30.00	240.00
SELECT BACKFILL	C.Y.	—	—	—	20.00	20.00
CLSM BACKFILL	C.Y.	282.60	—	—	—	282.60
PRESTRESSED CONCRETE BEAMS (TYPE J BT)	L.F.	—	—	1,645.00	—	1,645.00
APPROACH SLAB	S.Y.	—	—	—	281.20	281.20
SAW-CUT GROOVING	S.Y.	—	—	1,474.10	266.80	1,740.90
CONCRETE RAIL (TR4)	L.F.	—	—	663.40	120.00	783.40
STRUCTURAL STEEL	LB.	—	—	3,890.00	—	3,890.00
STAINLESS STEEL FIXED BEARING ASSEMBLY	EA.	—	—	10.00	—	10.00
STAINLESS STEEL EXP. BEARING ASSEMBLY	EA.	—	—	20.00	—	20.00
CLASS AA CONCRETE	C.Y.	—	—	440.70	—	440.70
CLASS A CONCRETE	C.Y.	118.60	130.80	—	18.80	268.20
(SP) INTERNALLY CURED CONCRETE	S.F.	—	—	4,251.80	—	4,251.80
(SP) COLLOIDAL SILICA CONCRETE	S.F.	—	—	4,251.80	—	4,251.80
REINFORCING STEEL	LB.	—	680.00	—	—	680.00
EPOXY COATED REINFORCING STEEL	LB.	16,420.00	17,940.00	116,990.00	2,840.00	154,190.00
PILES, FURNISHED (HP12X53)	L.F.	312.00	—	—	765.00	1,077.00
PILES, FURNISHED (HP12X74)	L.F.	1,898.00	—	—	—	1,898.00
PILES, DRIVEN (HP12X53)	L.F.	312.00	—	—	765.00	1,077.00
PILES, DRIVEN (HP12X74)	L.F.	1,898.00	—	—	—	1,898.00
PILE LOAD TEST (DYNAMIC)	EA.	1.00	—	—	1.00	2.00
(PL) PILOT HOLES	L.F.	559.00	—	—	—	559.00
PILE SPLICE, H-PILE (NON-BIDDABLE)	EA.	—	—	—	—	1.00
WATER REPELLENT (VISUALLY INSPECTED)	S.Y.	82.00	118.00	1,233.00	56.00	1,489.00
DRILLED SHAFTS 72" DIAMETER	L.F.	—	380.00	—	—	380.00
CROSSHOLE SONIC LOGGING	EA.	—	1.00	—	—	1.00
ELASTOMERIC COATING	S.F.	432.00	634.00	—	—	1,066.00
SEALED EXPANSION JOINTS	L.F.	—	—	43.20	—	43.20
SEALER CRACK PREPARATION	L.F.	—	—	40.80	—	40.80
SEALER RESIN	GAL.	—	—	0.50	—	0.50
TYPE I-A PLAIN RIPRAP	TON	—	—	—	—	4,290.00
TYPE I-A FILTER BLANKET	TON	—	—	—	—	770.00
6" PERFORATED PIPE UNDERDRAIN ROUND	L.F.	84.00	—	—	—	84.00
6" NON-PERF. PIPE UNDERDRAIN RND.	L.F.	60.00	—	—	—	60.00
REMOVAL OF EXISTING BRIDGE STRUCTURE	L.SUM	—	—	—	—	1.00

HYDRAULIC SUMMARY

TOTAL DRAINAGE AREA = 2,190.00 SQ. MILES
CONTROLLED DRAINAGE AREA = 0.00 SQ. MILES
EFFECTIVE DRAINAGE AREA = 2,190.00 SQ. MILES

FREQUENCY (YEARS)	DISCHARGE (CFS)	WATER SURFACE ELEVATION (FT)	VELOCITY (FPS)	CONTRACTION SCOUR (FT)	PIER SCOUR (FT)	TOTAL SCOUR (FT)
2	181	2768.49	1.60			
5	1,160	2770.66	2.97			
10	2,510	2771.72	4.43			
25	6,000	2772.97	7.63			
50	10,600	2774.18	10.71			
100	17,500	2776.41	14.21	16.53	7.58	24.11
OT = 433	41,696	2783.81	11.60	31.20	8.73	39.93
LOW BEAM ELEVATION = 2782.63						

FOUNDATION DATA

DESIGN CRITERIA	HP 12X74 PILING		HP 12X53 PILING	
	ABUT. NO. 1 (BRIDGE SEAT)	ABUT. NO. 2 (BRIDGE SEAT)	SLEEPER SLAB NO. 1	SLEEPER SLAB NO. 2
FACTORED PILE REACTION	175.3 TONS	169.1 TONS	83.5 TONS	83.5 TONS
MAXIMUM PILE TIP ELEVATION	2711.9	2704.4	2711.9	2711.4
PILE LENGTH	69 FT.	77 FT.	76 FT.	77 FT.

72" DIAMETER DRILLED SHAFTS

DESIGN CRITERIA	PIER NO. 1	PIER NO. 2
UNIT BEARING RESISTANCE	30 T.S.F.	30 T.S.F.
BEARING RESISTANCE FACTOR	0.5	0.5
FACTORED BEARING RESISTANCE	424 TONS	424 TONS
(1) UNIT FRICTION RESISTANCE	VARIES	VARIES
FRICTION RESISTANCE FACTOR	0.55	0.55
FACTORED FRICTION RESISTANCE	825 TONS	825 TONS
TOTAL FACTORED RESISTANCE	1249 TONS	1249 TONS
TOTAL FACTORED REACTION	1039.2 TONS	1039.2 TONS

FACTORED PILE RESISTANCE:
DRIVE PILING THROUGH THE COMPACTED FILL AND TO A POINT BEARING ON SOLID FOUNDATION MATERIAL AT THE APPROXIMATE ELEVATION SHOWN ON THE PLANS. IF A FACTORED AXIAL LOAD RESISTANCE EQUAL TO OR GREATER THAN THE FACTORED PILE REACTION IS NOT OBTAINED AT THIS ELEVATION, CONTINUE DRIVING UNTIL SUCH IS OBTAINED. THE LENGTH OF STEEL PILING SHOWN ON THE PLANS IS FOR ESTIMATING PURPOSES ONLY. IN NO CASE SHALL THE BOTTOM OF PILE BE HIGHER THAN THE MAXIMUM PILE TIP ELEVATION SHOWN ON FOUNDATION DATA.

(1) UNIT SIDE RESISTANCE CALCULATED USING THE BETA METHOD. SIDE RESISTANCE VARIES ALONG THE DRILLED SHAFT LENGTH.

SH-94 OVER BEAVER RIVER — TEXAS COUNTY
BRIDGE "A"

GENERAL PLAN AND ELEVATION (3 OF 3)

100'-130'-100' TYPE J P.C. BEAM SPANS, 0° SKEW,
40'-0" CLR. RDWY. W/ TR4 CONCRETE RAILS, ℄ STA. 183+48.53

DESIGN	EBR	
DETAIL	JFR	
CHECK	EBR	

CEC

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 33323(04) — SHEET NO. B003

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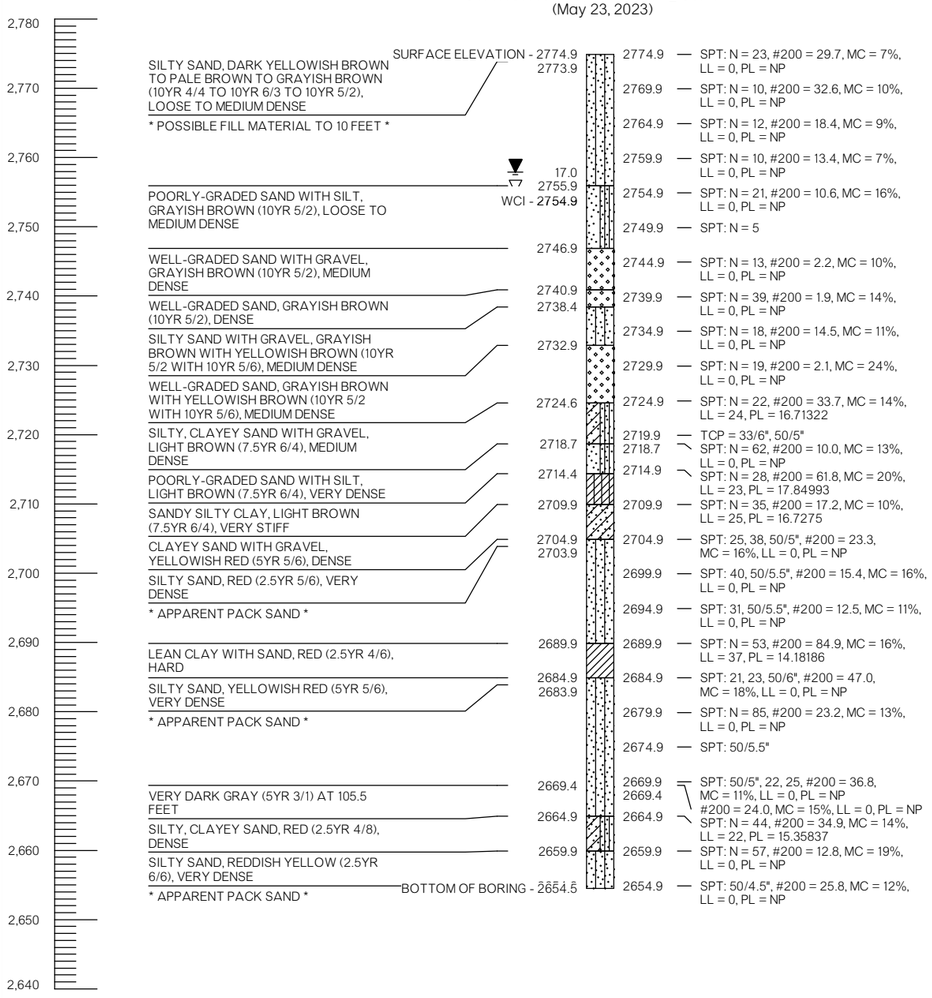
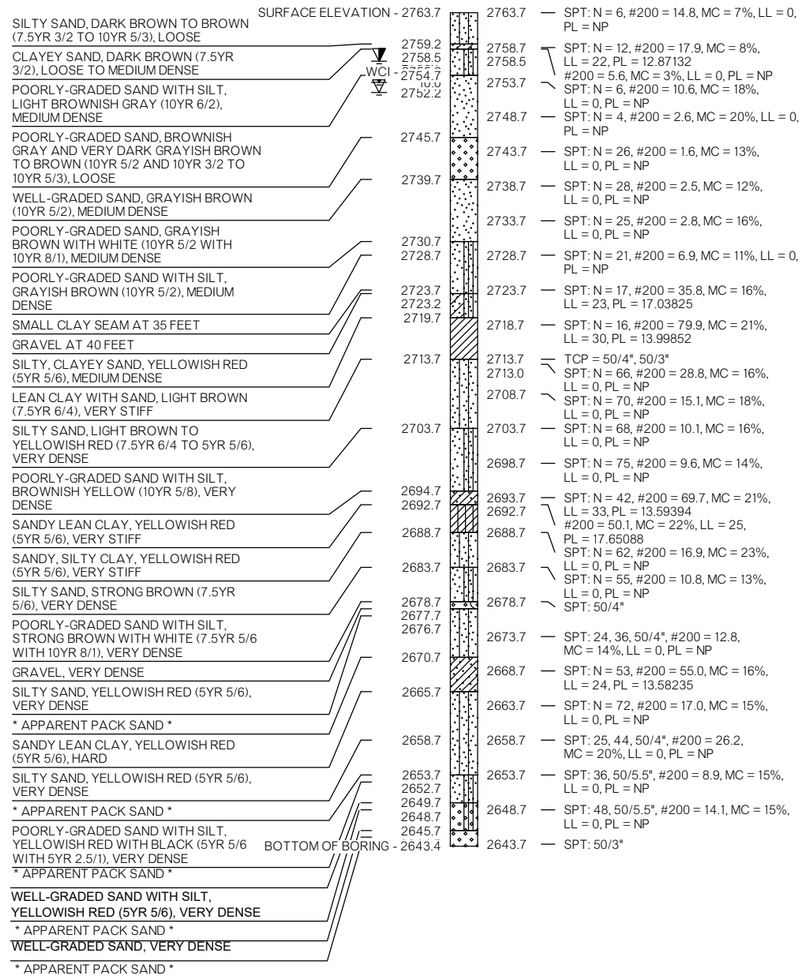
BORING NO. B-01

STATION 181+85, 48' left OF ℄ SURVEY
(May 23, 2023)



BORING NO. B-02

STATION 182+85, 26' right OF ℄ SURVEY
(May 18 - 19, 2023)



REVISIONS

REV. NO.	DESCRIPTION	DATE

SITE GEOLOGY

THE GEOLOGY OF THE PROJECT SITE WAS RESEARCHED USING THE "DIVISION SIX ENGINEERING CLASSIFICATION OF GEOLOGICAL MATERIALS", PUBLISHED BY THE OKLAHOMA DEPARTMENT OF TRANSPORTATION (ODOT).

ODOT PUBLICATION

DIVISION SIX OF THE "ENGINEERING CLASSIFICATION OF GEOLOGICAL MATERIALS", PUBLISHED BY THE OKLAHOMA DEPARTMENT OF TRANSPORTATION (ODOT) INDICATES THE PROJECT SITE IS UNDERLAIN BY TERRACE DEPOSITS (QT) AND THE OGALLALA UNIT (TO).

TERRACE DEPOSITS CONSIST OF SAND, SILT, CLAY, GRAVEL OR MIXTURES OF THESE. THESE MATERIALS WERE DEPOSITED BY STREAMS OR WIND AND MAY BE FOUND ADJACENT TO MOST STREAMS.

THE OGALLALA UNIT CONSISTS OF A HETEROGENEOUS CALCAREOUS MIXTURE OF SAND, GRAVEL, CALICHE, LIMESTONE, SILT, CLAY, AND LOCALLY VOLCANIC ASH. CONSOLIDATION AND CEMENTATION OF THESE MATERIALS OCCURS LOCALLY AND SOFT, MASSIVE SANDSTONES, THIN LIMESTONE AND CONGLOMERATES HAVE BEDDING CHARACTERISTICS EXTENDING OVER SEVERAL MILES, BUT IT IS NOT PRACTICAL IN THIS PUBLICATION TO SUBDIVIDE THE OGALLALA UNIT INTO SUBUNITS. CALICHE AND MODERATELY SOFT TO MODERATELY HARD CHALKY LIMESTONES ARE PROMINENT LOCALLY AND CAP SCARPS NEAR STREAMS. THE LIMESTONES WEATHER INTO SPHERICAL BOULDERS. GRAVELS AND COBBLES UP TO 4 INCHES IN DIAMETER ARE COMMON NEAR THE BASE OF THE UNIT.

THE TOTAL THICKNESS OF THE UNIT VARIES FROM ZERO AT THE EDGE OF ITS OUTCROP TO 570 FEET OR MORE IN VARIOUS AREAS OF THE OKLAHOMA PANHANDLE.

IN DIVISION 6, THE UNIT OUTCROPS THROUGHOUT MOST OF CIMARRON, TEXAS, BEAVER, ELLIS, SOUTHWESTERN WOODWARD, AND WESTERN HARPER COUNTIES. OUTLIERS OF THE UNIT OCCUR IN NORTHWESTERN WOODS COUNTY. IN THESE COUNTIES, THE OGALLALA UNIT RESTS ON VARIOUS GEOLOGIC UNITS AND MANTLES THE OUTCROPS OF THESE UNITS. THE UNDERLYING GEOLOGIC UNITS OUTCROP LOCALLY ALONG STREAM VALLEYS.

THE UNIT FORMS THE HIGH PLAINS PHYSIOGRAPHIC PROVINCE WHICH IN OKLAHOMA HAS A GENTLE EASTWARD SLOPE OF ABOUT 8 FEET PER MILE. THE TOPOGRAPHY ON THIS EASTWARD SLOPE VARIES FROM NEAR LEVEL PLAINS TO LOCAL BUTTES CAPPED BY RESISTANT LIMESTONES OR CALICHE. THE SAND AND SOFT SANDSTONES OF THE UNIT SUPPORT DENSE GROWTHS OF SHIN-OAK, SAGE, AND TALL GRASSES. STRIPPING OF SOIL COVER BY FARMERS IN THE 1930'S AND SUBSEQUENT WIND EROSION HAVE CAUSED MANY HUNDREDS OF SQUARE MILES TO EXHIBIT UNDULATING DUNE-TYPE TOPOGRAPHY THAT HAS SINCE BEEN COVERED BY VEGETATION. NUMEROUS DRY LAKES OR SINKLIKE DEPRESSIONS OCCUR IN THE PANHANDLE AND WESTERN HARPER COUNTY. THESE DEPRESSIONS WERE PROBABLY CAUSED BY COLLAPSE OF THE OGALLALA UNIT INTO A SOLUTION CAVITY IN THE UNDERLYING REDBEDS. THESE CAVITIES ARE CAUSED BY THE REMOVAL OF GYPSUM OR SALT, WHICH IS COMMON IN THE UNDERLYING REDBEDS. THE OGALLALA UNIT IS AN EXCELLENT AQUIFER AND GENERALLY POSSESSES GOOD QUALITY WATER WHICH IS USED EXTENSIVELY FOR IRRIGATION AND MUNICIPAL WATER PURPOSES. MUCH OF THE AREA IS CULTIVATED, OTHER AREAS ARE COMPOSED OF SHORT AND MID-GRASS PRAIRIES.

LEGEND

V. = VERY
FL. = FAIRLY
SL. = SLIGHTLY
LT. = LIGHT
MED. = MEDIUM
BRN. = BROWN
TR. = TRACE
DRK. = DARK
BLK. = BLACK

DCD = DIAMOND CORE DRILLING, ASTM D2113-83
SPT = STANDARD PENETRATION TEST, ASTM D1586
SS = SPLIT SPOON SAMPLER
N = NUMBER OF BLOWS PER 12 INCHES
MC = MOISTURE CONTENT
LL = LIQUID LIMIT
PL = PLASTIC LIMIT (NP=NO PLASTICITY)
#200 = PERCENT PASSING #200 SIEVE
UCS = UNCONFINED COMPRESSIVE STRENGTH
TCP = TEXAS CONE PENETROMETER
WCI = WET CAVE IN
▽ = WATER LEVEL WHILE DRILLING OR SAMPLING
▼ = WATER LEVEL AFTER DRILLING
▼ = WATER LEVEL 24 HOURS AFTER DRILLING
= TOP OF ROCK

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

NOTE: "SS" DENOTES STANDARD PENETRATION TEST, AASHTO D1586-84. "TCP" DENOTES TEXAS CONE PENETRATION TEST.

* NOTE: TOP OF ROCK LINE SHOWN FOR ESTIMATING PURPOSES ONLY.

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

*** NOTE: ROCK CLASSIFICATION IS BASED ON DRILLING CHARACTERISTICS AND VISUAL OBSERVATION OF ROCK CORE SAMPLES. PETROGRAPHIC ANALYSIS OF THIN SECTIONS OF THE ROCK CORE SAMPLES MAY REVEAL OTHER TYPES.

GEOTECHNICAL REPORT

ALL GEOTECHNICAL INFORMATION CONTAINED ON THIS SHEET IS COVERED BY THE ENGINEERING SEAL AFFIXED TO AN ORIGINAL GEOTECHNICAL ENGINEERING REPORT THAT HAS BEEN STAMPED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN OKLAHOMA. TO OBTAIN A COPY OF THE COMPLETE REPORT, CONTACT THE ODOT OFFICE ENGINEER AT (405) 521-2625. THE CONTRACTOR SHOULD BE FULLY AWARE OF THE SITE CONDITIONS PRIOR TO BEGINNING WORK. ANY ADDITIONAL GEOTECNICAL INFORMATION WHICH MAY BE DESIRED IS THE RESPONSIBILITY OF THE CONTRACTOR.

RED ROCK CONSULTING

SH 94 BRIDGE OVER BEAVER RIVER — TEXAS COUNTY, OKLAHOMA

SUBSURFACE PROFILE (SHEET 1 OF 2)

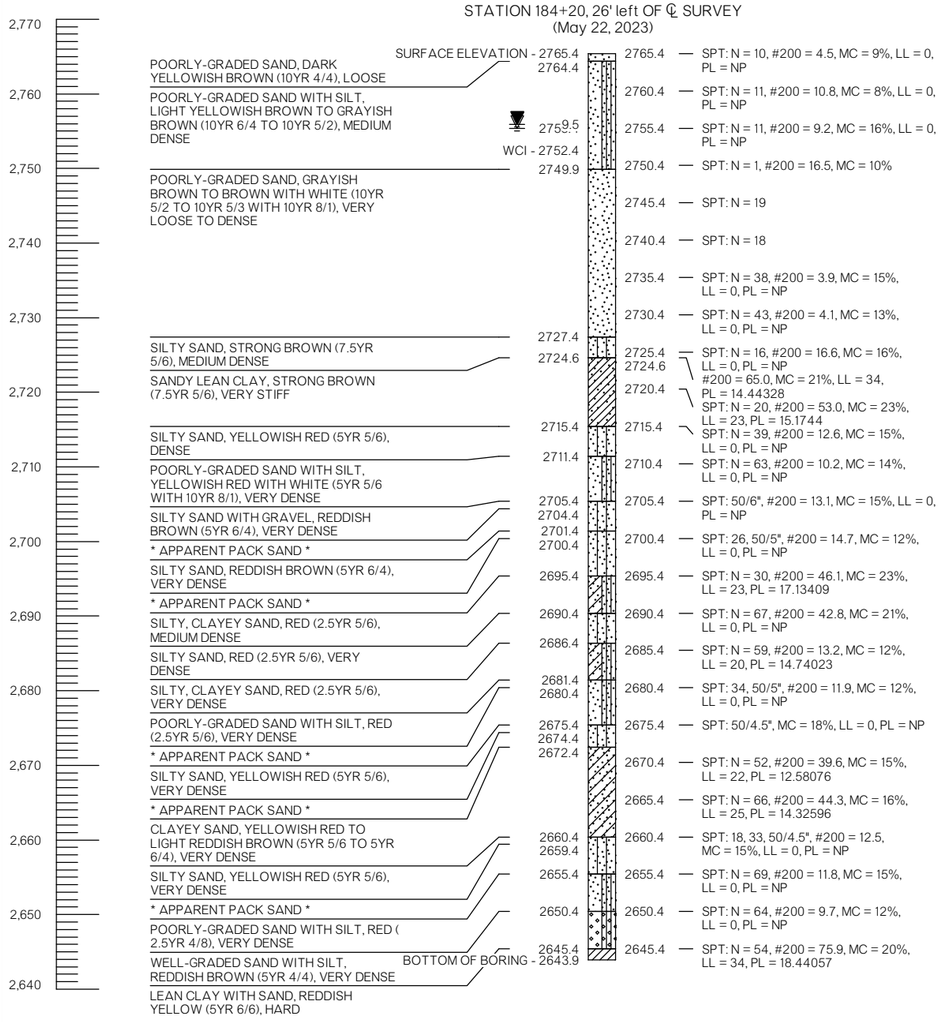
Design	EDC	6/23
Detail	EDC	6/23
Check	JWB	6/23
Squad:		
Engr.:		

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 33323(04) — SHEET NO. B004

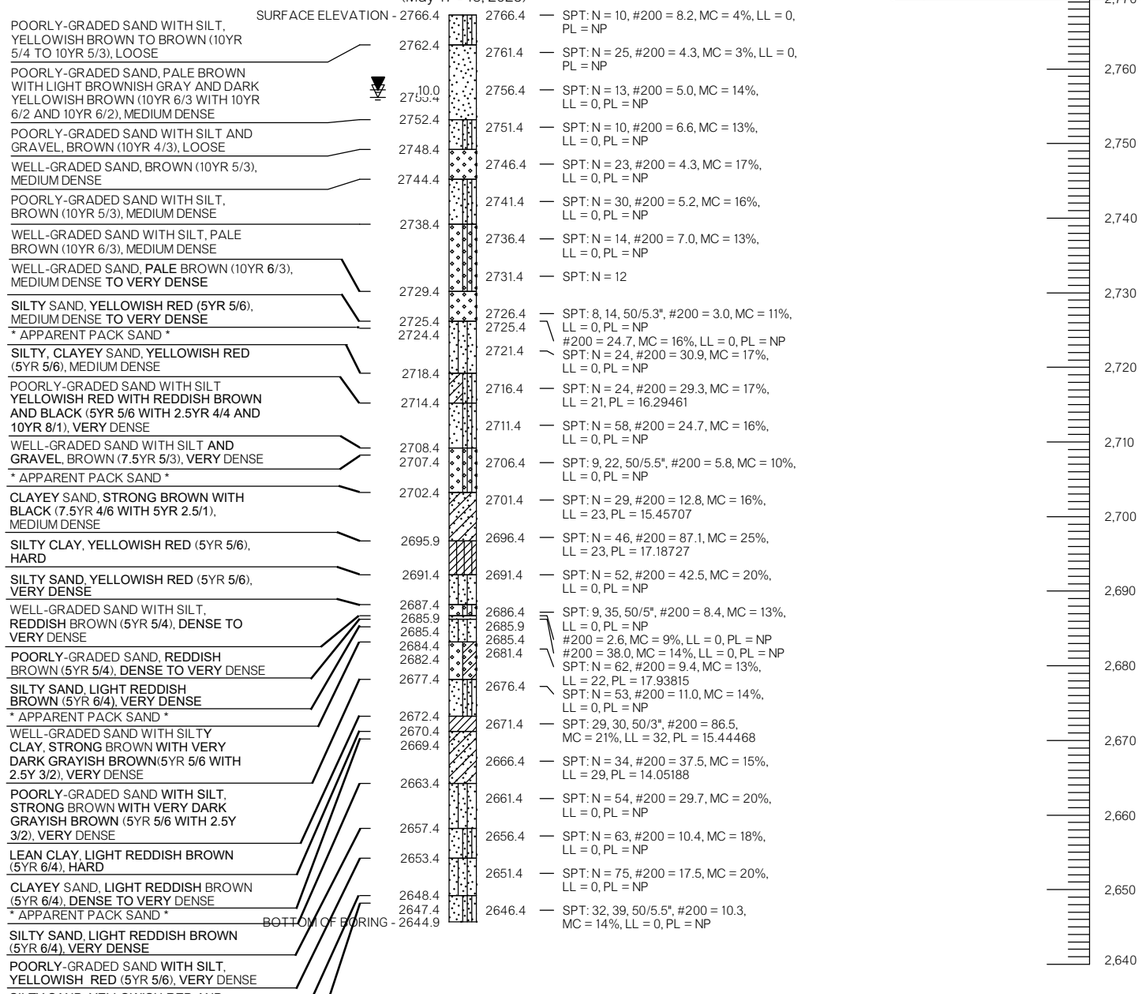
BORING NO. B-03

STATION 184+20, 26' left OF ℄ SURVEY
(May 22, 2023)



BORING NO. B-04

STATION 185+15, 22' right OF ℄ SURVEY
(May 17 - 18, 2023)



REVISIONS

REV. NO.	DESCRIPTION	DATE

SITE GEOLOGY

THE GEOLOGY OF THE PROJECT SITE WAS RESEARCHED USING THE "DIVISION SIX ENGINEERING CLASSIFICATION OF GEOLOGICAL MATERIALS", PUBLISHED BY THE OKLAHOMA DEPARTMENT OF TRANSPORTATION (ODOT).

ODOT PUBLICATION

DIVISION SIX OF THE "ENGINEERING CLASSIFICATION OF GEOLOGICAL MATERIALS", PUBLISHED BY THE OKLAHOMA DEPARTMENT OF TRANSPORTATION (ODOT) INDICATES THE PROJECT SITE IS UNDERLAIN BY TERRACE DEPOSITS (QT) AND THE OGALLALA UNIT (TO).

TERRACE DEPOSITS CONSIST OF SAND, SILT, CLAY, GRAVEL OR MIXTURES OF THESE. THESE MATERIALS WERE DEPOSITED BY STREAMS OR WIND AND MAY BE FOUND ADJACENT TO MOST STREAMS.

THE OGALLALA UNIT CONSISTS OF A HETEROGENEOUS CALCAREOUS MIXTURE OF SAND, GRAVEL, CALICHE, LIMESTONE, SILT, CLAY, AND LOCALLY VOLCANIC ASH. CONSOLIDATION AND CEMENTATION OF THESE MATERIALS OCCURS LOCALLY AND SOFT, MASSIVE SANDSTONES, THIN LIMESTONE AND CONGLOMERATES HAVE BEDDING CHARACTERISTICS EXTENDING OVER SEVERAL MILES, BUT IT IS NOT PRACTICAL IN THIS PUBLICATION TO SUBDIVIDE THE OGALLALA UNIT INTO SUBUNITS. CALICHE AND MODERATELY SOFT TO MODERATELY HARD CHALKY LIMESTONES ARE PROMINENT LOCALLY AND CAP SCARPS NEAR STREAMS. THE LIMESTONES WEATHER INTO SPHERICAL BOULDERS. GRAVELS AND COBBLES UP TO 4 INCHES IN DIAMETER ARE COMMON NEAR THE BASE OF THE UNIT.

THE TOTAL THICKNESS OF THE UNIT VARIES FROM ZERO AT THE EDGE OF ITS OUTCROP TO 570 FEET OR MORE IN VARIOUS AREAS OF THE OKLAHOMA PANHANDLE.

IN DIVISION 6, THE UNIT OUTCROPS THROUGHOUT MOST OF CIMARRON, TEXAS, BEAVER, ELLIS, SOUTHWESTERN WOODWARD, AND WESTERN HARPER COUNTIES. OUTLIERS OF THE UNIT OCCUR IN NORTHWESTERN WOODS COUNTY. IN THESE COUNTIES, THE OGALLALA UNIT RESTS ON VARIOUS GEOLOGIC UNITS AND MANTLES THE OUTCROPS OF THESE UNITS. THE UNDERLYING GEOLOGIC UNITS OUTCROP LOCALLY ALONG STREAM VALLEYS.

THE UNIT FORMS THE HIGH PLAINS PHYSIOGRAPHIC PROVINCE WHICH IN OKLAHOMA HAS A GENTLE EASTWARD SLOPE OF ABOUT 8 FEET PER MILE. THE TOPOGRAPHY ON THIS EASTWARD SLOPE VARIES FROM NEAR LEVEL PLAINS TO LOCAL BUTTES CAPPED BY RESISTANT LIMESTONES OR CALICHE. THE SAND AND SOFT SANDSTONES OF THE UNIT SUPPORT DENSE GROWTHS OF SHIN-OAK, SAGE, AND TALL GRASSES. STRIPPING OF SOIL COVER BY FARMERS IN THE 1930'S AND SUBSEQUENT WIND EROSION HAVE CAUSED MANY HUNDREDS OF SQUARE MILES TO EXHIBIT UNDULATING DUNE-TYPE TOPOGRAPHY THAT HAS SINCE BEEN COVERED BY VEGETATION. NUMEROUS DRY LAKES OR SINKLIKE DEPRESSIONS OCCUR IN THE PANHANDLE AND WESTERN HARPER COUNTY. THESE DEPRESSIONS WERE PROBABLY CAUSED BY COLLAPSE OF THE OGALLALA UNIT INTO A SOLUTION CAVITY IN THE UNDERLYING REDBEDS. THESE CAVITIES ARE CAUSED BY THE REMOVAL OF GYPSUM OR SALT, WHICH IS COMMON IN THE UNDERLYING REDBEDS. THE OGALLALA UNIT IS AN EXCELLENT AQUIFER AND GENERALLY POSSESSES GOOD QUALITY WATER WHICH IS USED EXTENSIVELY FOR IRRIGATION AND MUNICIPAL WATER PURPOSES. MUCH OF THE AREA IS CULTIVATED, OTHER AREAS ARE COMPOSED OF SHORT AND MID-GRASS PRAIRIES.

LEGEND

V. = VERY
FL. = FAIRLY
SL. = SLIGHTLY
LT. = LIGHT
MED. = MEDIUM
BRN. = BROWN
TR. = TRACE
DRK. = DARK
BLK. = BLACK

DCD = DIAMOND CORE DRILLING, ASTM D2113-83
SPT = STANDARD PENETRATION TEST, ASTM D1586
SS = SPLIT SPOON SAMPLER
N = NUMBER OF BLOWS PER 12 INCHES
MC = MOISTURE CONTENT
LL = LIQUID LIMIT
PL = PLASTIC LIMIT (NP=NO PLASTICITY)
#200 = PERCENT PASSING #200 SIEVE
UCS = UNCONFINED COMPRESSIVE STRENGTH
TCP = TEXAS CONE PENETROMETER
WCI = WET CAVE IN
▽ = WATER LEVEL WHILE DRILLING OR SAMPLING
▼ = WATER LEVEL AFTER DRILLING
▼ = WATER LEVEL 24 HOURS AFTER DRILLING
= TOP OF ROCK

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

NOTE: "SS" DENOTES STANDARD PENETRATION TEST, AASHTO D1586-84. "TCP" DENOTES TEXAS CONE PENETRATION TEST.

NOTE: TOP OF ROCK LINE SHOWN FOR ESTIMATING PURPOSES ONLY.

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

NOTE: ROCK CLASSIFICATION IS BASED ON DRILLING CHARACTERISTICS AND VISUAL OBSERVATION OF ROCK CORE SAMPLES. PETROGRAPHIC ANALYSIS OF THIN SECTIONS OF THE ROCK CORE SAMPLES MAY REVEAL OTHER TYPES.

GEOTECHNICAL REPORT

ALL GEOTECHNICAL INFORMATION CONTAINED ON THIS SHEET IS COVERED BY THE ENGINEERING SEAL AFFIXED TO AN ORIGINAL GEOTECHNICAL ENGINEERING REPORT THAT HAS BEEN STAMPED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN OKLAHOMA. TO OBTAIN A COPY OF THE COMPLETE REPORT, CONTACT THE ODOT OFFICE ENGINEER AT (405) 521-2625. THE CONTRACTOR SHOULD BE FULLY AWARE OF THE SITE CONDITIONS PRIOR TO BEGINNING WORK. ANY ADDITIONAL GEOTECNICAL INFORMATION WHICH MAY BE DESIRED IS THE RESPONSIBILITY OF THE CONTRACTOR.

RED ROCK CONSULTING

SH 94 BRIDGE OVER BEAVER RIVER — TEXAS COUNTY, OKLAHOMA

SUBSURFACE PROFILE
(SHEET 2 OF 2)

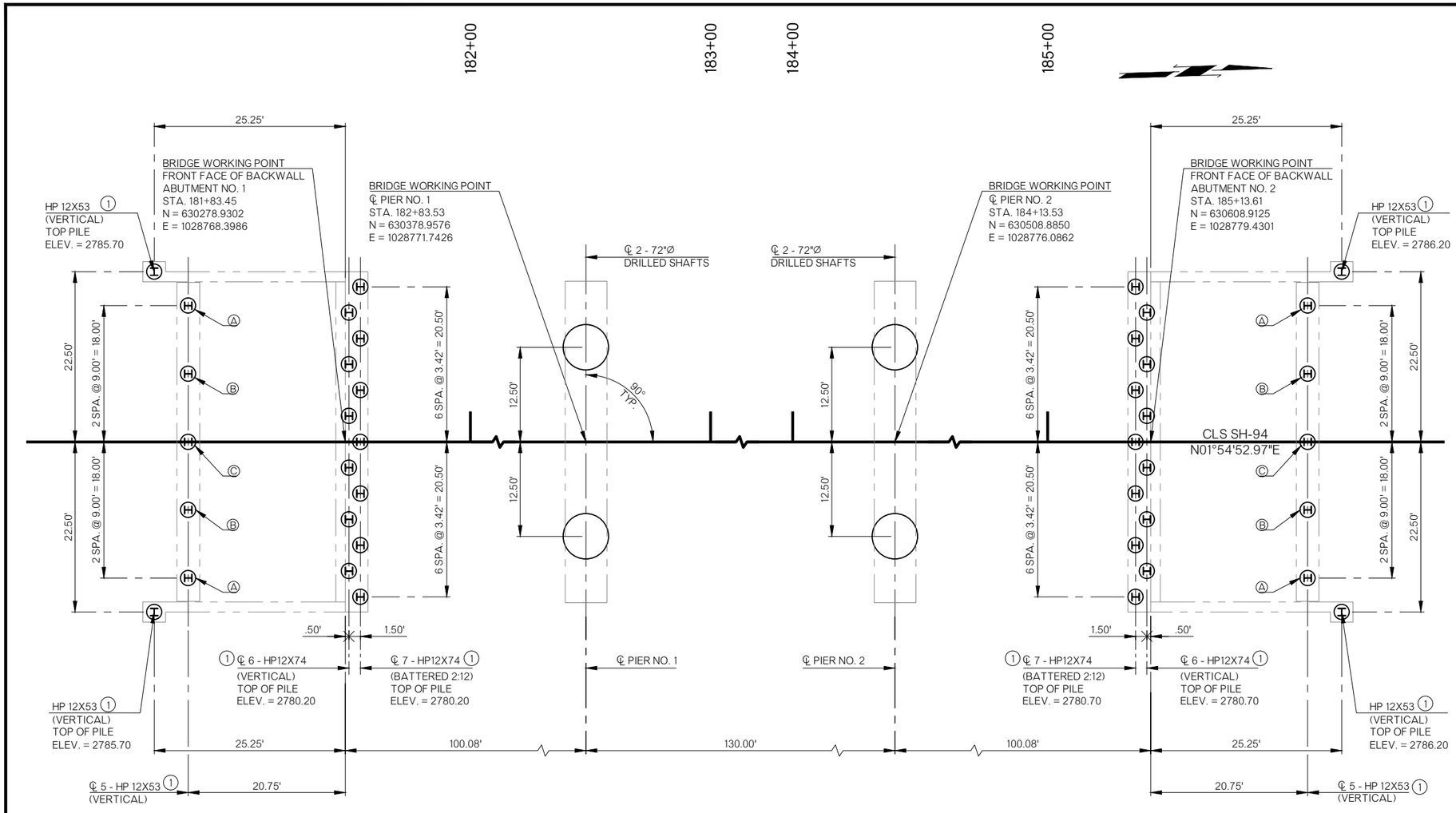
Design	EDC	6/23
Detail	EDC	6/23
Check	JWB	6/23
Squad:		
Engr.:		

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 33323(04) — SHEET NO. B005

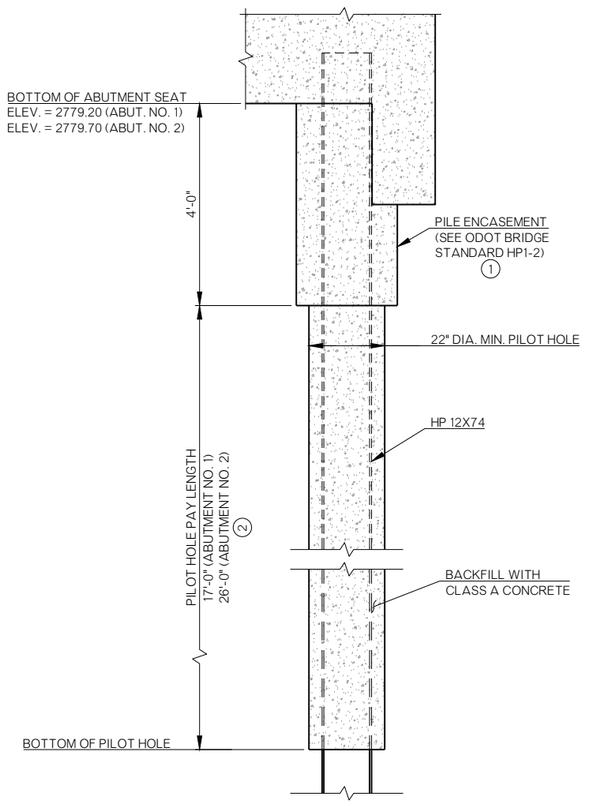
CEC // TRANSPORTATION

DESCRIPTION	REVISIONS	DATE



SUBSTRUCTURE STAKING DIAGRAM

(NOT TO SCALE)



DETAIL OF PILOT HOLES

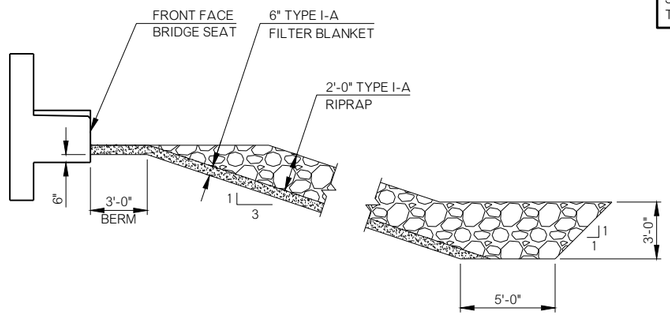
(AT ALL ABUTMENT SEAT PILES)
(VERTICAL PILE SHOWN, BATTERED PILES SIMILAR)

(1) FOR PILE ENCASEMENT DETAILS, SEE ODOT BRIDGE STD. HP1-2. PILE ENCASEMENT DETAILS FOR HP12X74 PILES WILL BE SIMILAR TO HP12X53 PILES SHOWN ON ODOT BRIDGE STANDARD.

(2) AFTER PILOT HOLES ARE DRILLED, PILES SHALL BE LOWERED INTO THE PILOT HOLES. DRIVE PILES UNTIL THE REQUIRED CAPACITY IS REACHED OR THE MINIMUM PILE TIP ELEVATION AS SHOWN IN THE PLANS. IN NO CASE SHALL THE BOTTOM OF PILE BE HIGHER THAN THE MAXIMUM PILE TIP ELEVATION SHOWN ON FOUNDATION DATA. BACKFILL PILOT HOLES WITH CLASS A CONCRETE BELOW THE STEEL PILE ENCASEMENT. ALL COSTS OF BACKFILLING THE PILOT HOLES INCLUDING CLASS A CONCRETE AND CASING, IF NECESSARY, SHALL BE INCLUDED IN THE UNIT BID PRICE PER LINEAR FOOT OF "(PL) PILOT HOLES".

ORIENT ABUTMENT SEAT PILES SUCH THAT THE FACE OF THE WEB IS PERPENDICULAR TO THE FRONT FACE OF THE ABUTMENT BACKWALL. ORIENT WING PILES SUCH THAT THE FACE OF THE WEB IS PERPENDICULAR TO THE WINGWALL. ORIENT SLEEPER SLAB PILES SUCH THAT THE FACE OF THE PILE WEB IS PERPENDICULAR TO THE FACE OF THE SLEEPER SLAB.

THE PERMANENT CASING METHOD AS DESCRIBED IN SUBSECTION 516.04C OF THE STANDARD SPECIFICATIONS WILL BE REQUIRED. PROVIDE PERMANENT CASING THE ENTIRE LENGTH OF THE DRILLED SHAFT. THE DOUBLE CASING METHOD WILL NOT BE ALLOWED FOR THE HOLE EXCAVATION.



RIPRAP AND FILTER BLANKET DETAIL

SLEEPER SLAB TOP OF PILE ELEVATIONS

PILE	SLEEPER SLAB NO. 1	SLEEPER SLAB NO. 2
A	2787.35	2787. 91
B	2787.53	2788.09
C	2787.71	2788.27

SH-94 OVER BEAVER RIVER
BRIDGE "A"
TEXAS COUNTY

SUBSTRUCTURE STAKING DIAGRAM

DESIGN	EBR	
DETAIL	JFR	BFE
CHECK	EBR	

CEC

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 33323(04)
SHEET NO. B006

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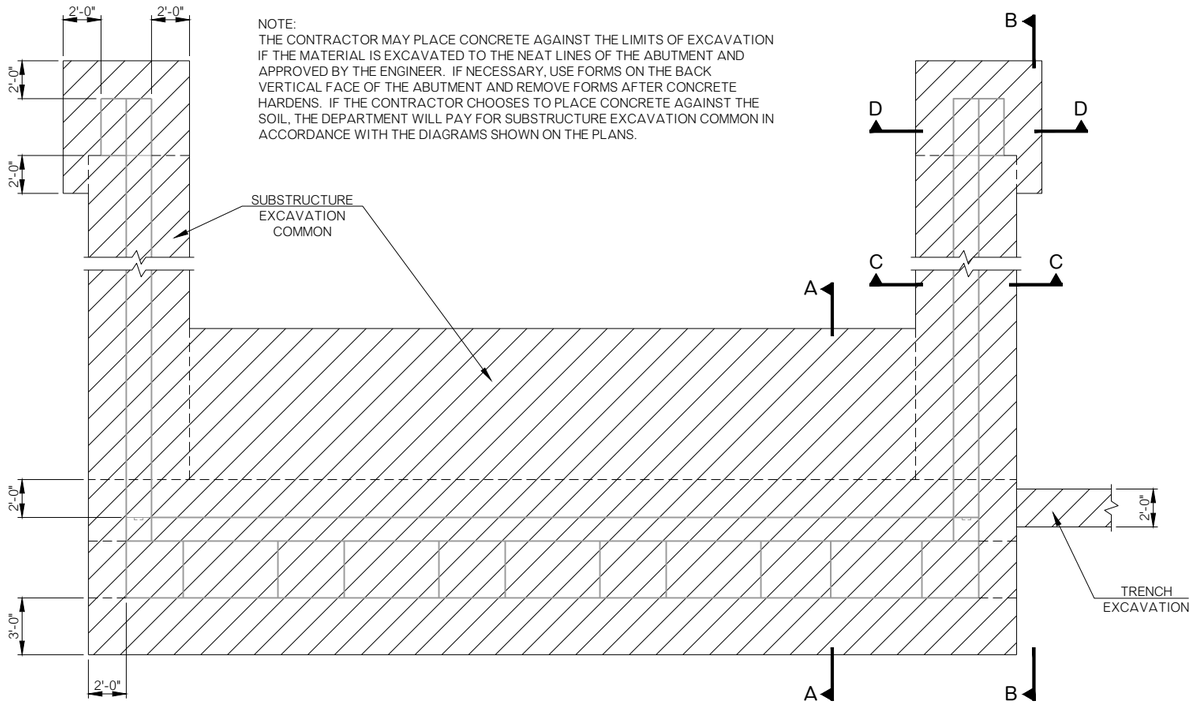
CEC // TRANSPORTATION

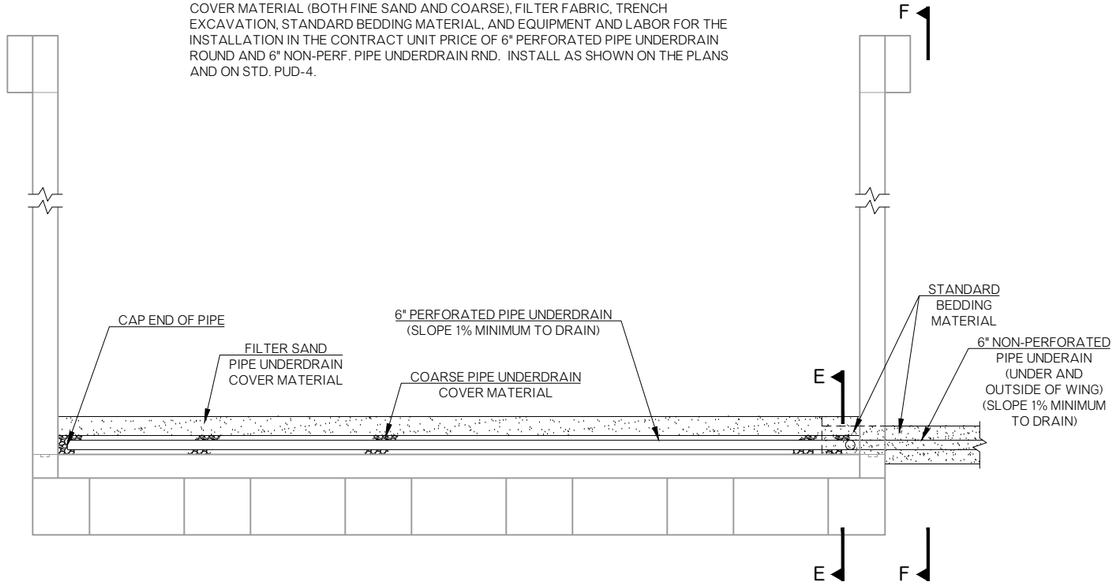
DESCRIPTION	REVISIONS	DATE

NOTE:
THE CONTRACTOR MAY PLACE CONCRETE AGAINST THE LIMITS OF EXCAVATION IF THE MATERIAL IS EXCAVATED TO THE NEAT LINES OF THE ABUTMENT AND APPROVED BY THE ENGINEER. IF NECESSARY, USE FORMS ON THE BACK VERTICAL FACE OF THE ABUTMENT AND REMOVE FORMS AFTER CONCRETE HARDENS. IF THE CONTRACTOR CHOOSES TO PLACE CONCRETE AGAINST THE SOIL, THE DEPARTMENT WILL PAY FOR SUBSTRUCTURE EXCAVATION COMMON IN ACCORDANCE WITH THE DIAGRAMS SHOWN ON THE PLANS.

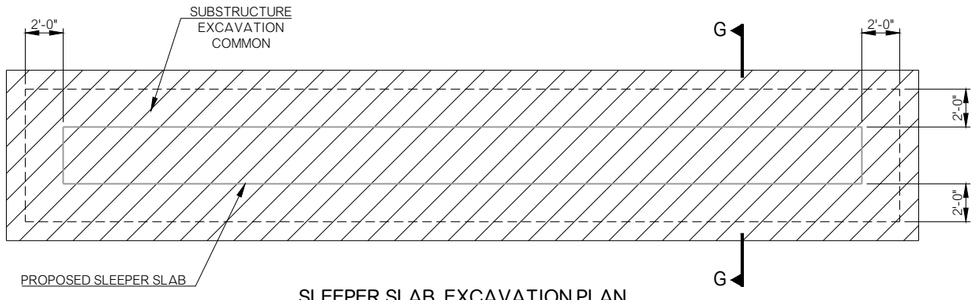


ABUTMENT EXCAVATION PLAN
(ABUTMENT NO. 2 SHOWN; ABUTMENT NO. 1 SIMILAR)

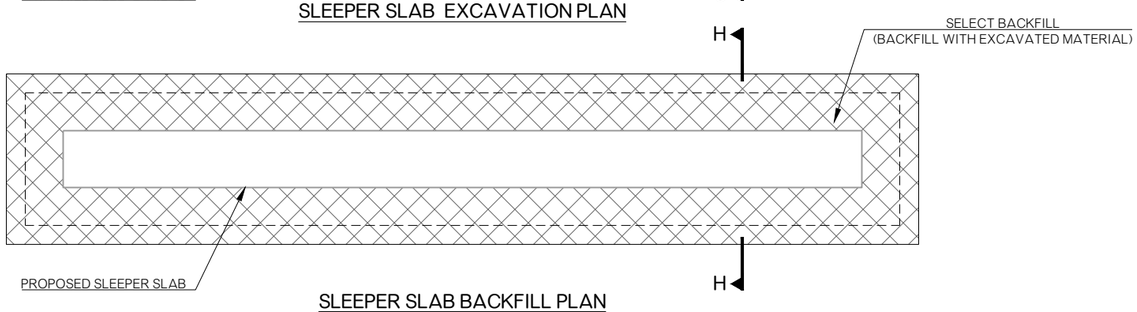
NOTE:
THE ENGINEER MAY ADJUST THE EXTENT, LOCATION AND DEPTH OF 6" NON-PERFORATED PIPE UNDERDRAIN DURING CONSTRUCTION. INCLUDE THE COST OF PIPE UNDERDRAIN COVER MATERIAL (BOTH FINE SAND AND COARSE), FILTER FABRIC, TRENCH EXCAVATION, STANDARD BEDDING MATERIAL, AND EQUIPMENT AND LABOR FOR THE INSTALLATION IN THE CONTRACT UNIT PRICE OF 6" PERFORATED PIPE UNDERDRAIN ROUND AND 6" NON-PERF. PIPE UNDERDRAIN RND. INSTALL AS SHOWN ON THE PLANS AND ON STD. PUD-4.



ABUTMENT PIPE UNDERDRAIN PLAN
(ABUTMENT NO. 2 SHOWN; ABUTMENT NO. 1 SIMILAR)



SLEEPER SLAB EXCAVATION PLAN



SLEEPER SLAB BACKFILL PLAN

NOTE:
FOR SECTION VIEWS, SEE SHEET B008.

SH-94 OVER BEAVER RIVER
BRIDGE "A"
TEXAS COUNTY

SUBSTRUCTURE EXCAVATION AND
PIPE UNDERDRAIN ASSEMBLY DETAILS
(1 OF 2)

DESIGN	EBR	
DETAIL	JFR	BFE
CHECK	EBR	

CEC

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 33323(04)
SHEET NO. B007

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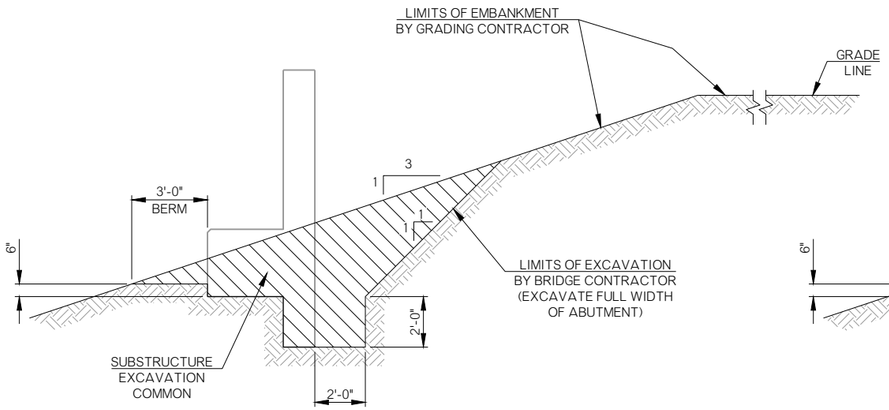
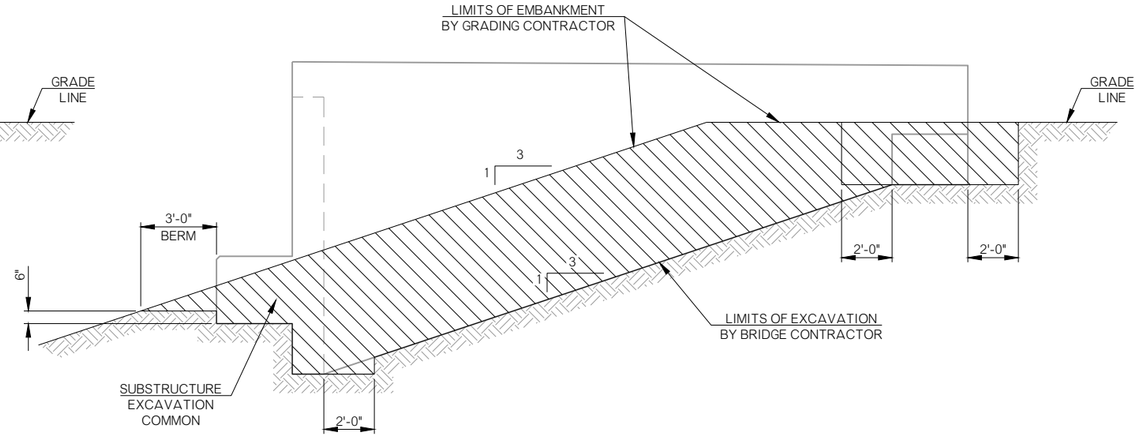
CEC // TRANSPORTATION

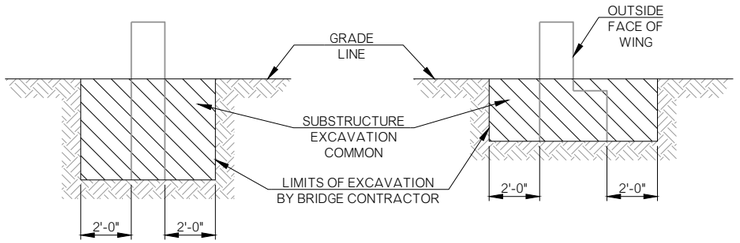
DESCRIPTION	REVISIONS	DATE



SECTION A-A

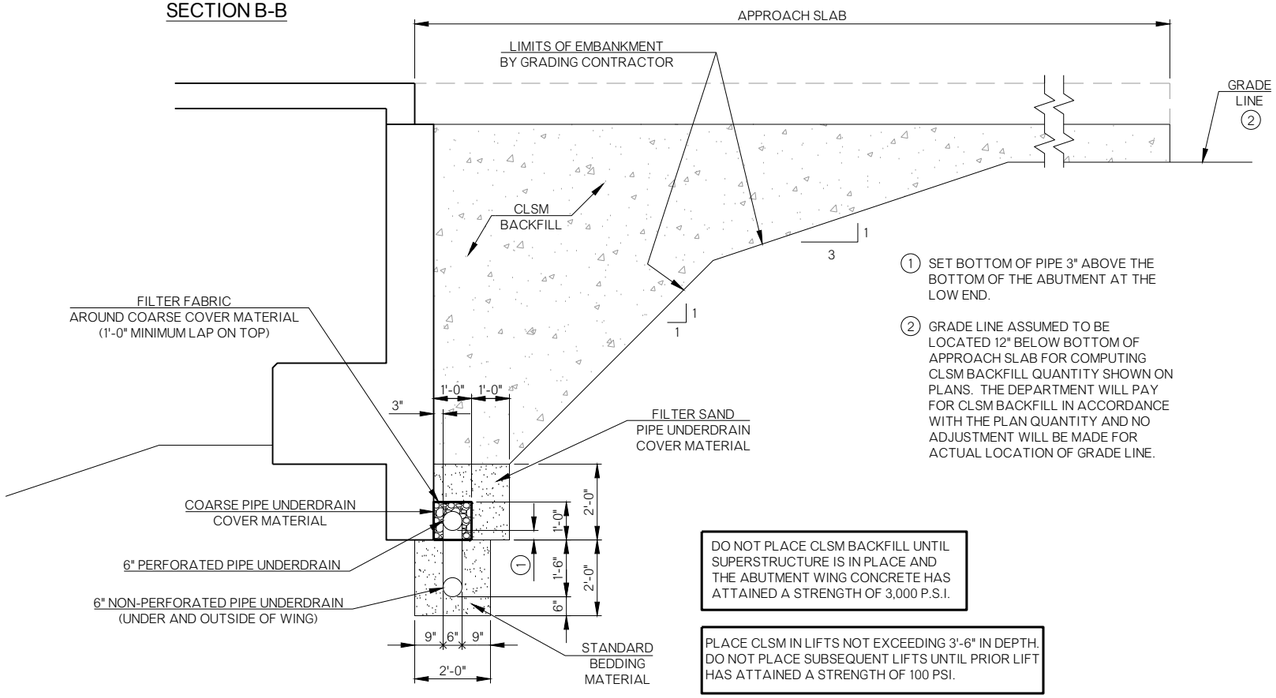


SECTION B-B



SECTION C-C

SECTION D-D

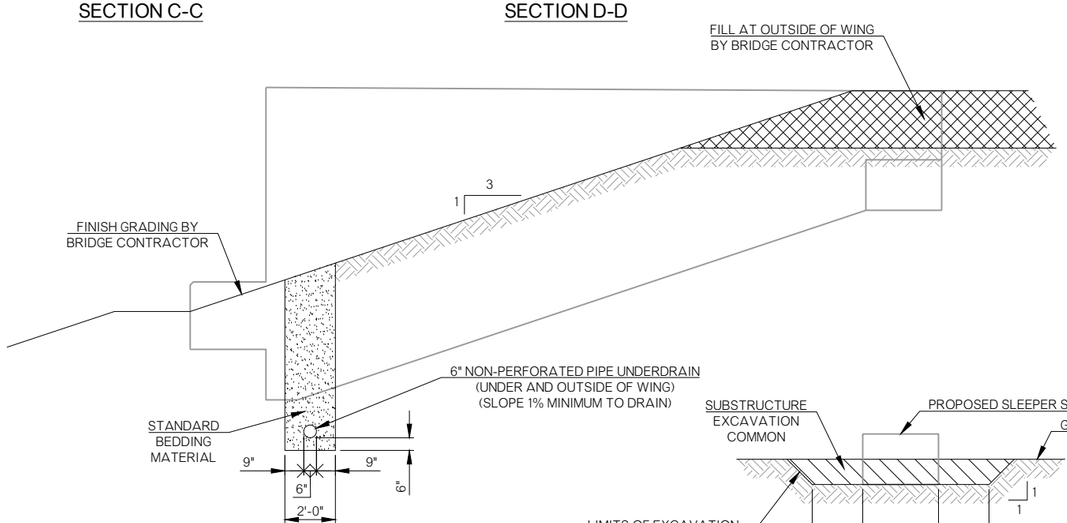


SECTION E-E

1. SET BOTTOM OF PIPE 3" ABOVE THE BOTTOM OF THE ABUTMENT AT THE LOW END.
2. GRADE LINE ASSUMED TO BE LOCATED 12" BELOW BOTTOM OF APPROACH SLAB FOR COMPUTING CLSM BACKFILL QUANTITY SHOWN ON PLANS. THE DEPARTMENT WILL PAY FOR CLSM BACKFILL IN ACCORDANCE WITH THE PLAN QUANTITY AND NO ADJUSTMENT WILL BE MADE FOR ACTUAL LOCATION OF GRADE LINE.

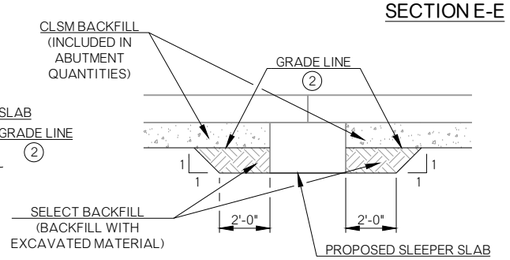
DO NOT PLACE CLSM BACKFILL UNTIL SUPERSTRUCTURE IS IN PLACE AND THE ABUTMENT WING CONCRETE HAS ATTAINED A STRENGTH OF 3,000 P.S.I.

PLACE CLSM IN LIFTS NOT EXCEEDING 3'-6" IN DEPTH. DO NOT PLACE SUBSEQUENT LIFTS UNTIL PRIOR LIFT HAS ATTAINED A STRENGTH OF 100 PSI.



SECTION F-F

SECTION G-G



SECTION H-H

SH-94 OVER BEAVER RIVER
BRIDGE "A"

TEXAS COUNTY

SUBSTRUCTURE EXCAVATION AND PIPE UNDERDRAIN ASSEMBLY DETAILS

(2 OF 2)

DESIGN	EBR	
DETAIL	JFR	BFE
CHECK	EBR	

CEC

STATE OF OKLAHOMA

DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 33323(04)

SHEET NO. B008

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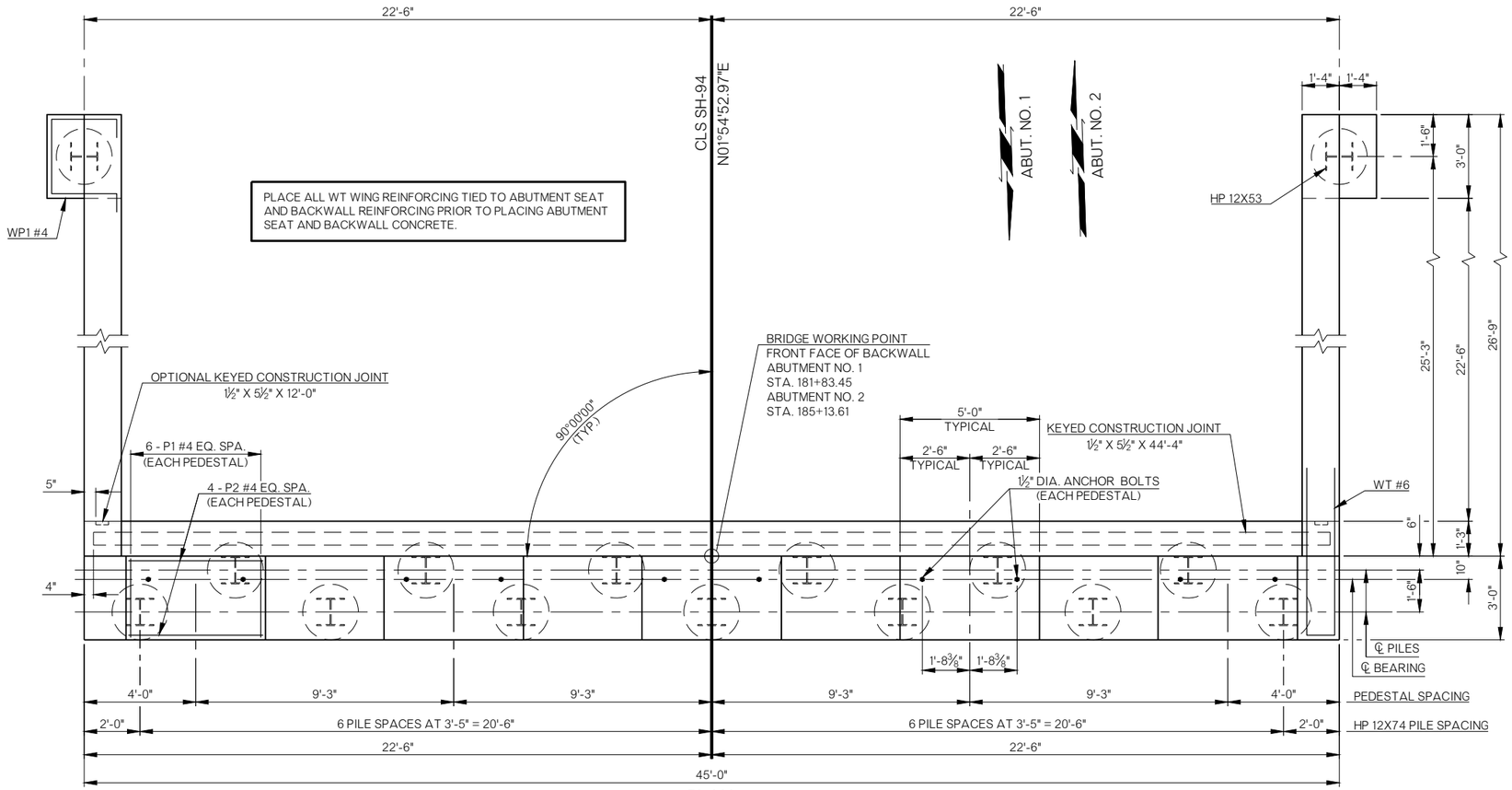
CEC // TRANSPORTATION

DESCRIPTION	REVISIONS	DATE

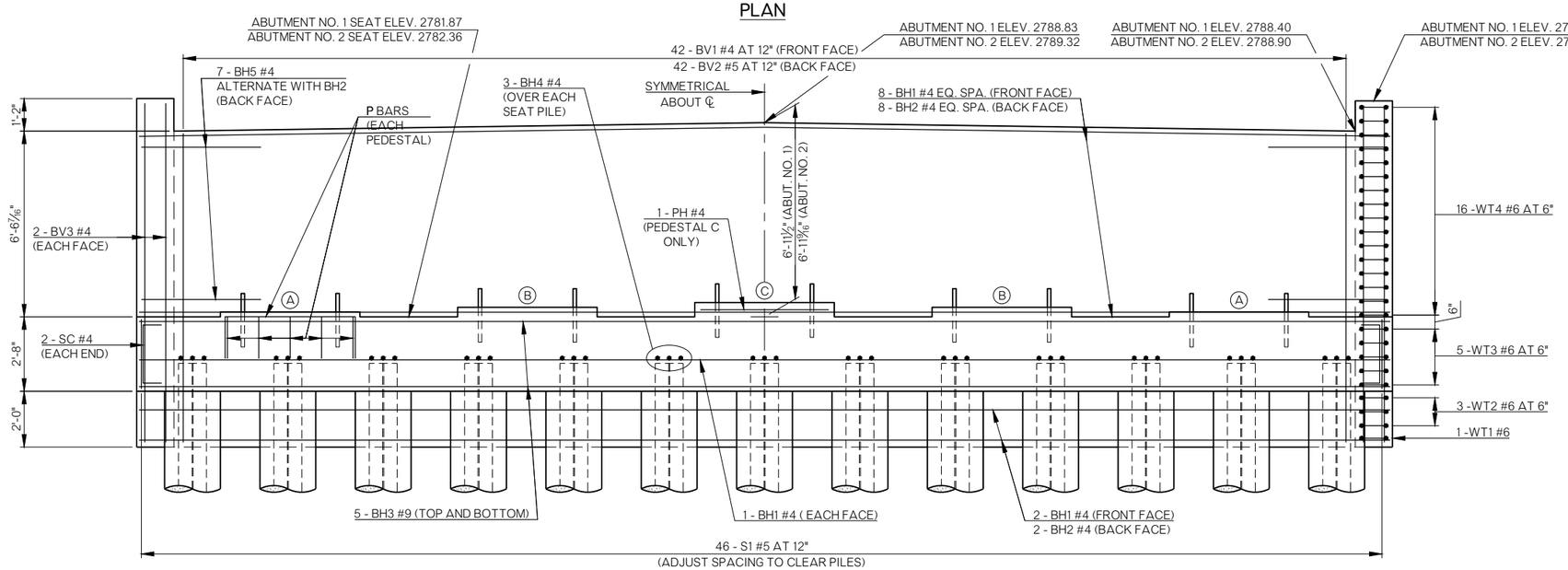
PLACE ALL WT WING REINFORCING TIED TO ABUTMENT SEAT AND BACKWALL REINFORCING PRIOR TO PLACING ABUTMENT SEAT AND BACKWALL CONCRETE.



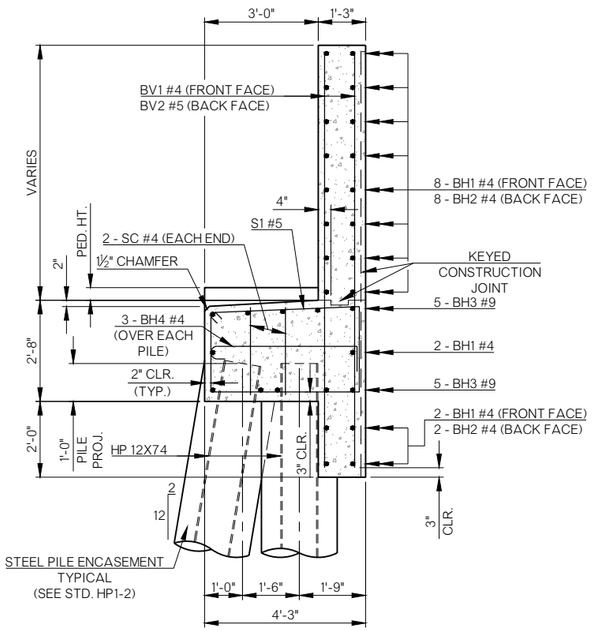
PLAN

ABUTMENT NO. 1 PEDESTAL SCHEDULE			
PEDESTAL	PED. HEIGHT	PED. ELEV.	# OF PH BARS
Ⓐ	3"	2782.12	0
Ⓑ	5¼"	2782.31	0
Ⓒ	7½"	2782.49	1

ABUTMENT NO. 2 PEDESTAL SCHEDULE			
PEDESTAL	PED. HEIGHT	PED. ELEV.	# OF PH BARS
Ⓐ	3"	2782.62	0
Ⓑ	5¼"	2782.80	0
Ⓒ	7½"	2782.99	1



ELEVATION



TYPICAL SECTION THRU SEAT

NOTES:
FOR WING DETAILS, SEE SHEET B010.

FOR DETAIL OF URETHANE COATING AND WATER REPELLENT TREATMENT, SUMMARY OF ABUTMENT QUANTITIES, BAR BENDS, AND BAR LISTS SEE SHEET B011.

SH-94 OVER BEAVER RIVER
BRIDGE "A"

TEXAS COUNTY

ABUTMENT DETAILS
(1 OF 3)

DESIGN	EBR	
DETAIL	JFR	BFE
CHECK	EBR	

CEC

STATE OF OKLAHOMA

DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 33323(04)

SHEET NO. B009

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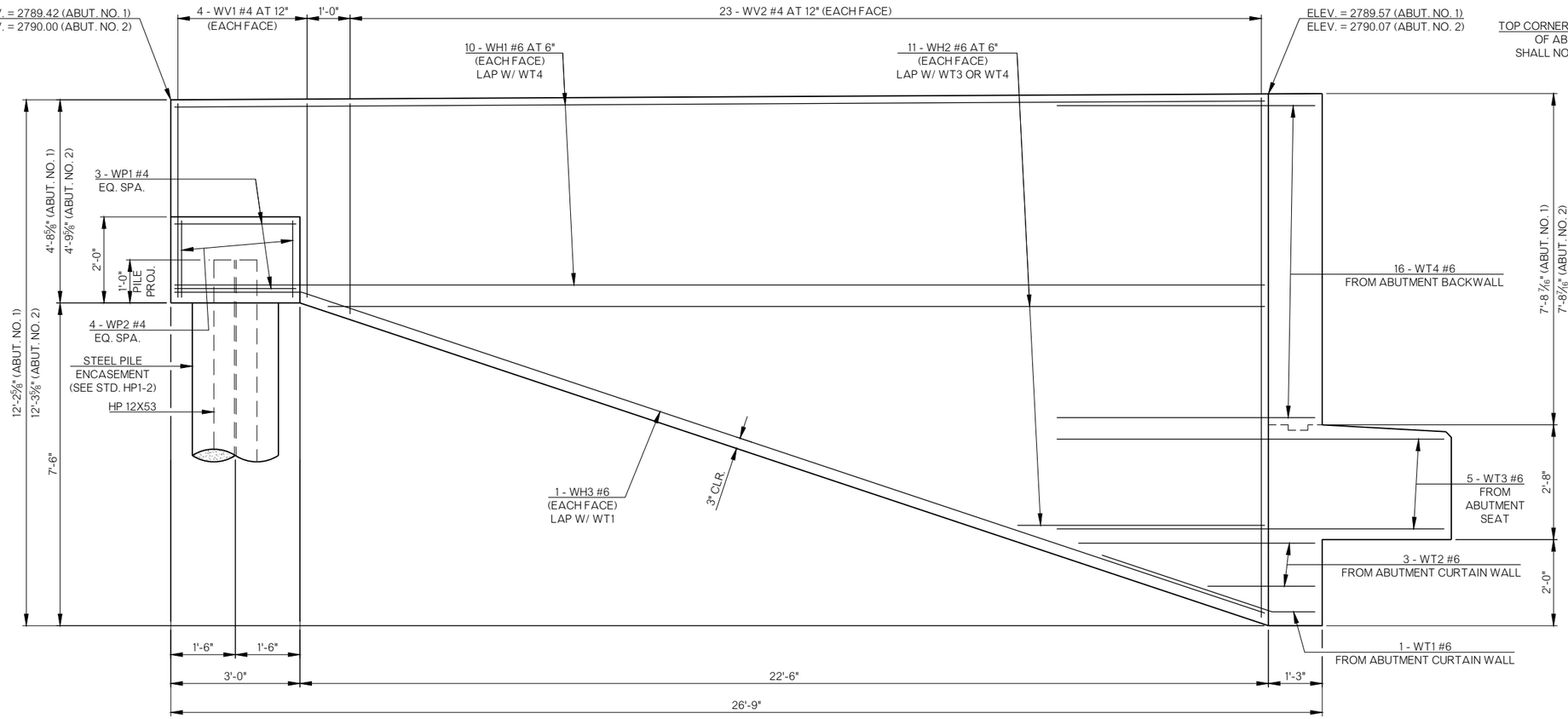
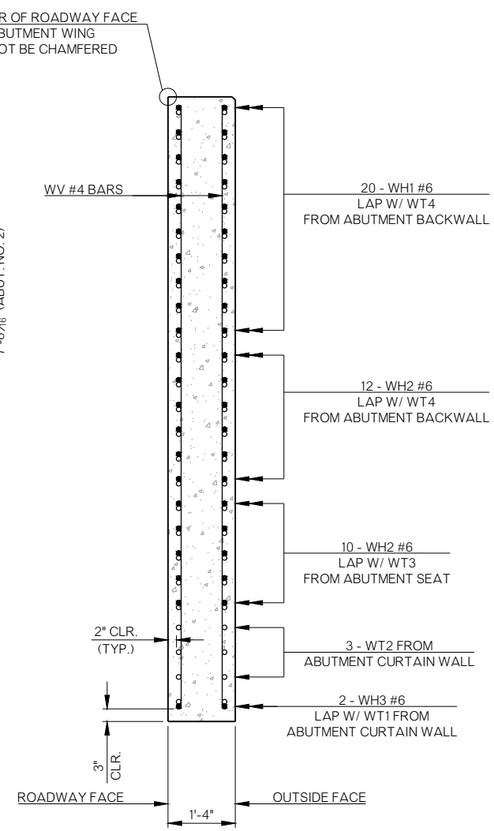
CEC // TRANSPORTATION

DESCRIPTION	REVISIONS	DATE



WING ELEVATION



SECTION THRU WING AT BACK FACE OF ABUTMENT SEAT

NOTE:
FOR BAR BENDS AND BAR LISTS, SEE SHEET B011.

SH-94 OVER BEAVER RIVER BRIDGE "A"	TEXAS COUNTY	DESIGN	EBR	
ABUTMENT DETAILS (2 OF 3)		DETAIL	JFR	BFE
		CHECK	EBR	
		CEC		
STATE OF OKLAHOMA	DEPARTMENT OF TRANSPORTATION			
	JOB PIECE NO. 33323(04)		SHEET NO. B010	

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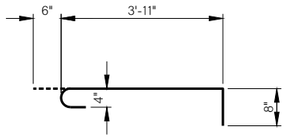
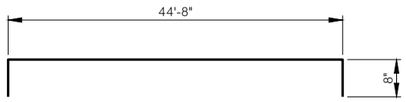
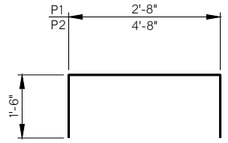


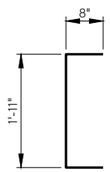
BH4 #4 X 5'-1"



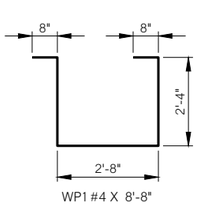
BH2 #4 X 46'-0"



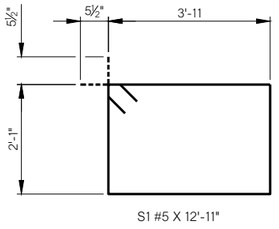
P1 #4 X 5'-8"
P2 #4 X 7'-8"



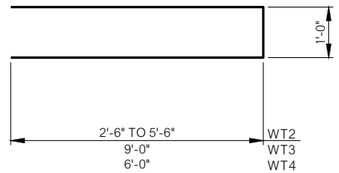
SC #4 X 3'-3"



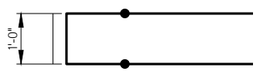
WP1 #4 X 8'-8"



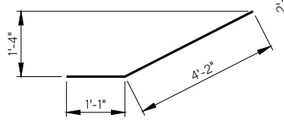
S1 #5 X 12'-11"



WT2 #6 X 9'-0" AVG.
WT3 #6 X 19'-0"
WT4 #6 X 13'-0"

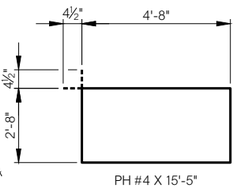


ELEVATION

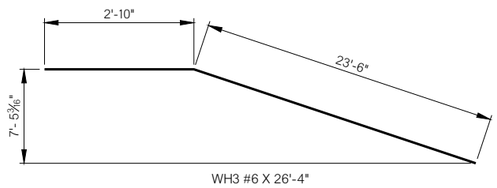


PLAN

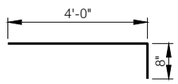
WT1 #6 X 11'-6"



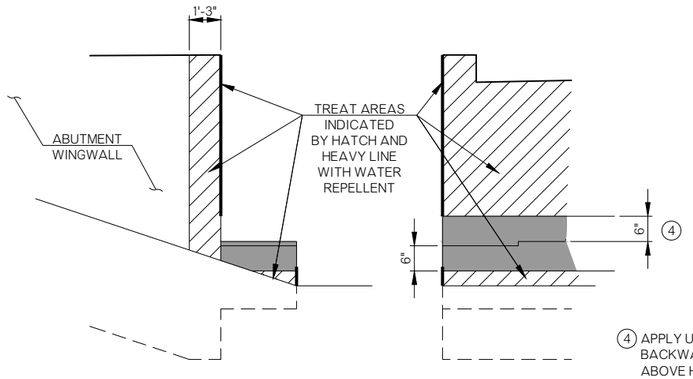
PH #4 X 15'-5"



WH3 #6 X 26'-4"



BH5 #4 X 4'-8"



SIDE ELEVATION

4 APPLY URETHANE COATING ON BACKWALL TO AN ELEVATION 6" ABOVE HIGHEST PEDESTAL.

URETHANE COATING & WATER REPELLENT TREATMENT DETAILS

NOTES FOR URETHANE COATING:
URETHANE COATING SHALL BE APPLIED AS STATED IN THE GENERAL NOTE "URETHANE COATING SURFACE TREATMENT" AND AS NOTED BELOW.

1. MASK FACE AND ENDS OF BRIDGE SEAT AND BACKWALL TO PROVIDE A CLEAN STRAIGHT FINISH AT EDGES OF URETHANE COATING APPLICATION.
2. APPLY URETHANE COATING TO SURFACES INDICATED BY SHADED AREAS, INCLUDING TOP OF BRIDGE SEAT, ALL SURFACES OF PEDESTALS (UNLESS NOTED OTHERWISE), TO AN ELEVATION 6" BELOW THE TOP OF BRIDGE SEAT ON FRONT FACE AND ENDS OF BRIDGE SEAT, AND ALONG THE FRONT FACE OF BACKWALL FROM TOP OF BRIDGE SEAT TO AN ELEVATION 6" ABOVE THE TALLEST PEDESTAL, AS SHOWN. REMOVE URETHANE COATING FROM ANY SURFACE OUTSIDE OF THE AREAS INDICATED IN THE PLANS.
3. TREAT THE REMAINING EXPOSED SURFACES OF THE BRIDGE SEATS AND BACKWALLS WITH PENETRATING WATER REPELLENT SURFACE TREATMENT, AS SHOWN. THE WATER REPELLENT SHALL SLIGHTLY OVERLAP THE URETHANE COATING.

ABUTMENT NO. 1 BAR LIST

	MARK	SIZE	NO.	FORM	LENGTH	LENGTH VARIATION
	EPOXY COATED REINFORCING					
	BH1	#4	12	STR.	44'-8"	
	BH2	#4	10	BNT.	46'-0"	
	BH3	#9	10	STR.	44'-8"	
	BH4	#4	39	BNT.	5'-1"	
	BH5	#4	14	BNT.	4'-8"	
1	BV1	#4	42	STR.	10'-11½" AVG.	10'-9" TO 11'-2"
1	BV2	#5	42	STR.	10'-11½" AVG.	10'-9" TO 11'-2"
	BV3	#4	4	STR.	11'-11"	
	P1	#4	30	BNT.	5'-8"	
	P2	#4	20	BNT.	7'-8"	
	PH	#4	1	BNT.	15'-5"	
	S1	#5	46	BNT.	12'-11"	
	SC	#4	4	BNT.	3'-3"	
	WH1	#6	40	STR.	25'-2"	
2	WH2	#6	44	STR.	13'-3" AVG.	5'-9" TO 20'-9"
	WH3	#6	4	BNT.	26'-4"	
	WP1	#4	6	BNT.	8'-8"	
	WP2	#4	8	STR.	1'-7"	
	WT1	#6	2	BNT.	11'-6"	
3	WT2	#6	6	BNT.	9'-0" AVG.	6'-0" TO 12'-0"
	WT3	#6	10	BNT.	19'-0"	
	WT4	#6	32	BNT.	13'-0"	
	WV1	#4	16	STR.	4'-3"	
4	WV2	#4	92	STR.	8'-3" AVG.	4'-8" TO 11'-10"

ABUTMENT NO. 2 BAR LIST

	MARK	SIZE	NO.	FORM	LENGTH	LENGTH VARIATION
	EPOXY COATED REINFORCING					
	BH1	#4	12	STR.	44'-8"	
	BH2	#4	10	BNT.	46'-0"	
	BH3	#9	10	STR.	44'-8"	
	BH4	#4	39	BNT.	5'-1"	
	BH5	#4	14	BNT.	4'-8"	
1	BV1	#4	42	STR.	10'-11½" AVG.	10'-9" TO 11'-2"
1	BV2	#5	42	STR.	10'-11½" AVG.	10'-9" TO 11'-2"
	BV3	#4	4	STR.	11'-11"	
	P1	#4	30	BNT.	5'-8"	
	P2	#4	20	BNT.	7'-8"	
	PH	#4	1	BNT.	15'-5"	
	S1	#5	46	BNT.	12'-11"	
	SC	#4	4	BNT.	3'-3"	
	WH1	#6	40	STR.	25'-2"	
2	WH2	#6	44	STR.	13'-3" AVG.	5'-9" TO 20'-9"
	WH3	#6	4	BNT.	26'-4"	
	WP1	#4	6	BNT.	8'-8"	
	WP2	#4	8	STR.	1'-7"	
	WT1	#6	2	BNT.	11'-6"	
3	WT2	#6	6	BNT.	9'-0" AVG.	6'-0" TO 12'-0"
	WT3	#6	10	BNT.	19'-0"	
	WT4	#6	32	BNT.	13'-0"	
	WV1	#4	16	STR.	4'-4"	
4	WV2	#4	92	STR.	8'-3½" AVG.	4'-9" TO 11'-10"

1 TWO SETS OF 21 BARS
2 FOUR SETS OF 11 BARS
3 TWO SETS OF 3 BARS
4 FOUR SETS OF 23 BARS

SUMMARY OF ABUTMENT QUANTITIES

ITEM	UNIT	ABUT. NO. 1	ABUT. NO. 2	TOTAL
SUBSTRUCTURE EXCAVATION COMMON	C.Y.	105	105	210
CLSM BACKFILL	C.Y.	141.3	141.3	282.6
ELASTOMERIC COATING	S.F.	216	216	432
CLASS A CONCRETE	C.Y.	59.3	59.3	118.6
EPOXY COATED REINFORCING STEEL	LB.	8,210	8,210	16,420
PILES, FURNISHED (HP 12X53)	L.F.	148	164	312
PILES, FURNISHED (HP 12X74)	L.F.	897	1,001	1,898
PILES, DRIVEN (HP 12X53)	L.F.	148	164	312
PILES, DRIVEN (HP 12X74)	L.F.	897	1,001	1,898
PILE LOAD TEST (DYNAMIC)	EA.	1	—	1
(PL) PILOT HOLES	L.F.	221	338	559
WATER REPELLENT (VISUALLY INSPECTED)	S.Y.	41	41	82
6" PERFORATED PIPE UNDERDRAIN ROUND	L.F.	42	42	84
6" NON-PERF. PIPE UNDERDRAIN RND.	L.F.	30	30	60

CEC // TRANSPORTATION

DESCRIPTION	REVISIONS	DATE

SH-94 OVER BEAVER RIVER
BRIDGE "A"
TEXAS COUNTY

ABUTMENT DETAILS
(3 OF 3)

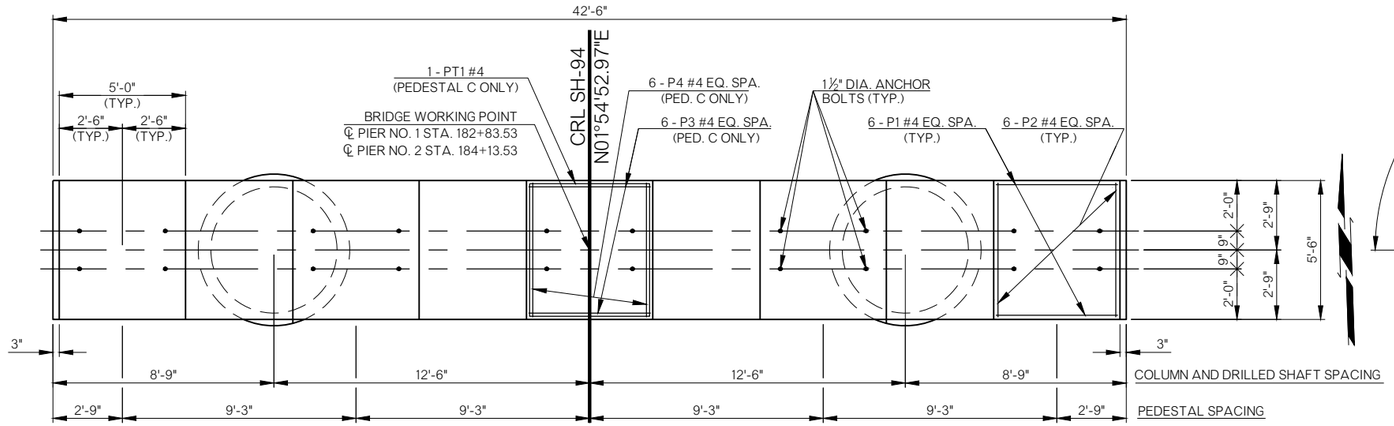
DESIGN	EBR	
DETAIL	JFR	
CHECK	EBR	

CEC

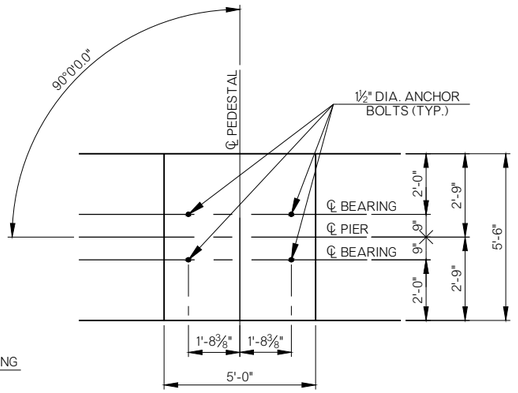
STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 33323(04)
SHEET NO. B011

CEC // TRANSPORTATION

DESCRIPTION	REVISIONS	DATE



PLAN



ANCHOR BOLT LAYOUT

PEDESTAL SCHEDULE

PEDESTAL	PED. HEIGHT	PEDESTAL ELEVATION	
		PIER NO. 1	PIER NO. 2
(A)	3"	2782.53	2782.72
(B)	5¼"	2782.71	2782.91
(C)	7 7/16"	2782.90	2783.09

PIER BAR LIST

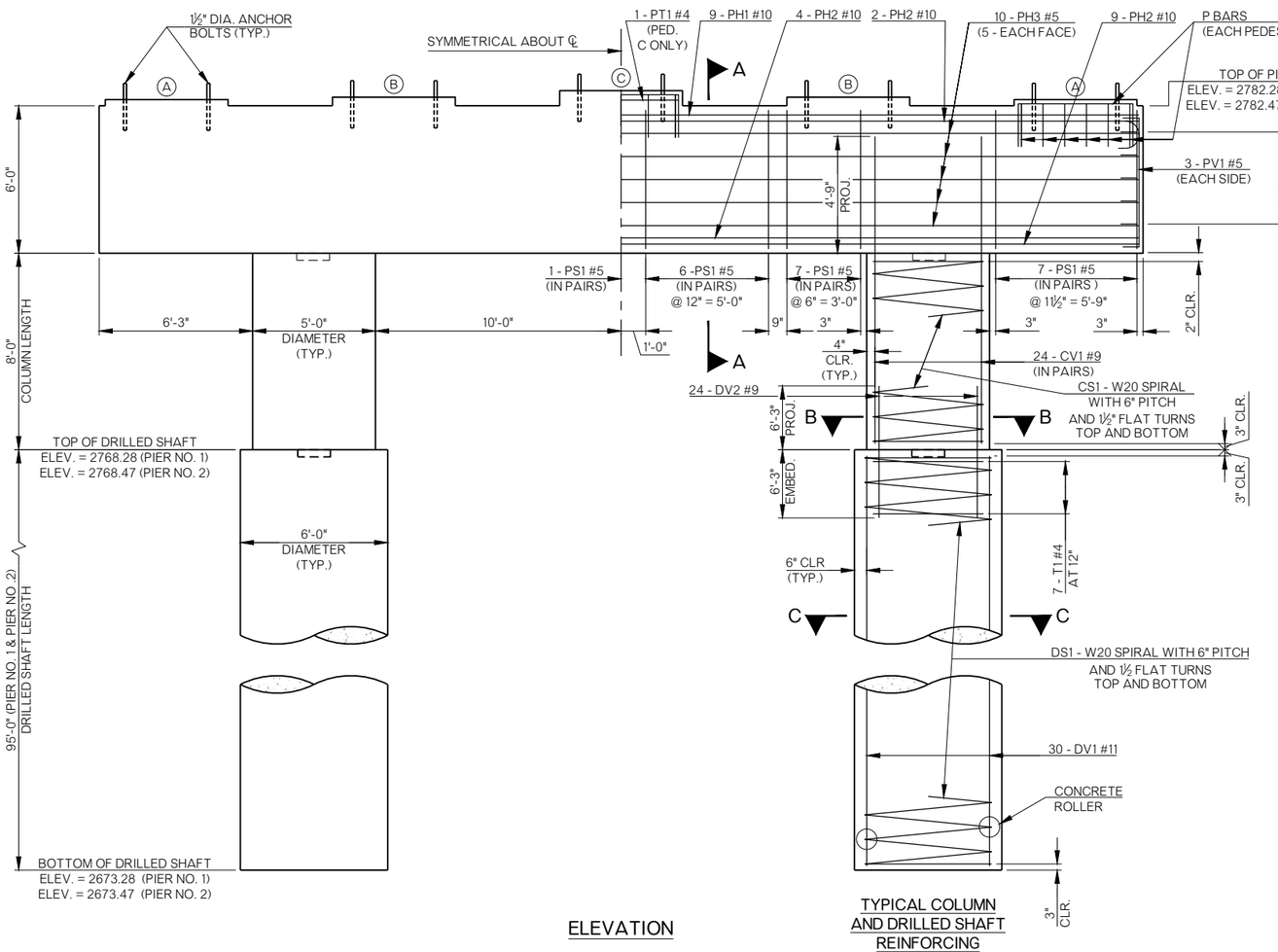
(ONE SHOWN, TWO REQUIRED)

	MARK	SIZE	NO.	FORM	LENGTH
	EPOXY COATED REINFORCING				
	CV1	#9	48	STR.	12'-6"
	P1	#4	24	BNT.	7'-4"
	P2	#4	24	BNT.	7'-10"
	P3	#4	6	BNT.	7'-7"
	P4	#4	6	BNT.	8'-1"
	PH1	#10	9	BNT.	45'-0"
	PH2	#10	15	STR.	42'-2"
	PH3	#5	10	STR.	42'-2"
	PH4	#5	10	BNT.	6'-8"
	PS1	#5	82	BNT.	18'-7"
	PT1	#4	1	BNT.	20'-5"
	PV1	#5	6	BNT.	7'-0"
	PLAIN REINFORCING				
(1)	CS1	W20	2	BNT.	246'-9"
(1) (2)	DS1	W20	2	BNT.	2,993'-10"
(2) (3)	DV1	#11	60	STR.	100'-6"
(2)	DV2	#9	48	STR.	12'-6"
(2)	T1	#4	14	BNT.	16'-8"

(1) LENGTH SHOWN DOES NOT ACCOUNT FOR SPLICES. CONTRACTOR MAY ADD SPLICES AS NECESSARY, BUT PAYMENT WILL NOT BE MADE FOR EXTRA LENGTH REQUIRED FOR SPLICES.

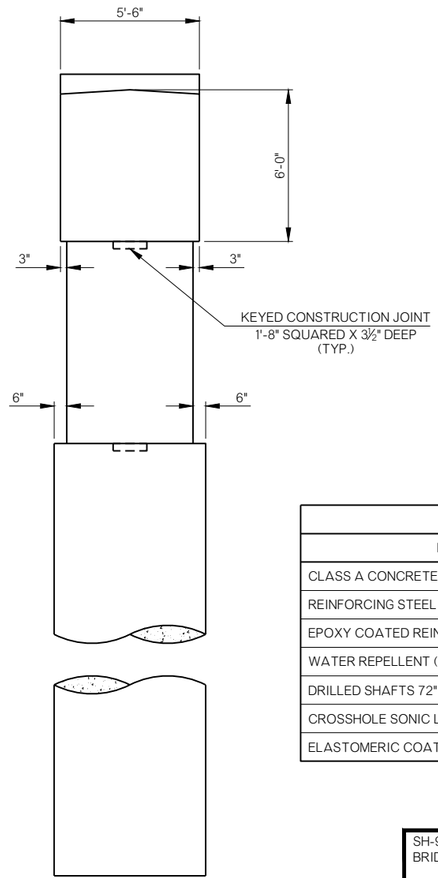
(2) INCLUDED IN THE CONTRACT UNIT PRICE BID PER LINEAR FOOT OF DRILLED SHAFTS.

(3) INCLUDES 1 - 6'-0" MINIMUM LAP LENGTH.



ELEVATION

TYPICAL COLUMN AND DRILLED SHAFT REINFORCING



SIDE

PIER QUANTITIES

ITEM	UNIT	PIER NO. 1	PIER NO. 2	TOTAL
CLASS A CONCRETE	C.Y.	65.4	65.4	130.8
REINFORCING STEEL	LB.	340	340	680
EPOXY COATED REINFORCING STEEL	LB.	8,970	8,970	17,940
WATER REPELLENT (VISUALLY INSPECTED)	S.Y.	59	59	118
DRILLED SHAFTS 72" DIAMETER	L.F.	190	190	380
CROSSHOLE SONIC LOGGING	EA.	-	-	1.0
ELASTOMERIC COATING	S.F.	317	317	634

NOTE:
FOR BAR BENDS, SECTION VIEWS, AND ADDITIONAL PIER DETAILS, SEE SHEET B013.

SH-94 OVER BEAVER RIVER
BRIDGE "A"

TEXAS COUNTY

PIER DETAILS
(1 OF 2)

DESIGN	EBR	
DETAIL	JFR	BFE
CHECK	EBR	

CEC

STATE OF OKLAHOMA

DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 33323(04)

SHEET NO. B012

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CEC // TRANSPORTATION

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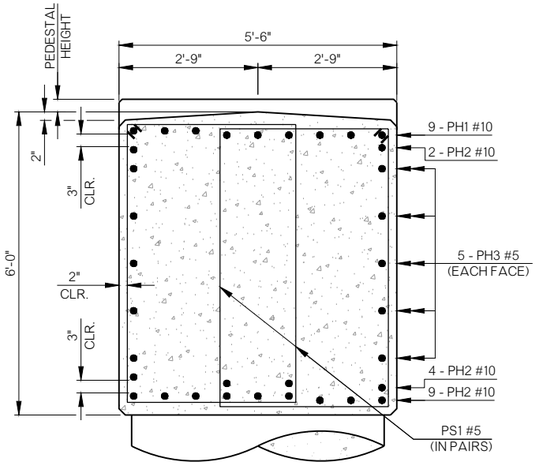
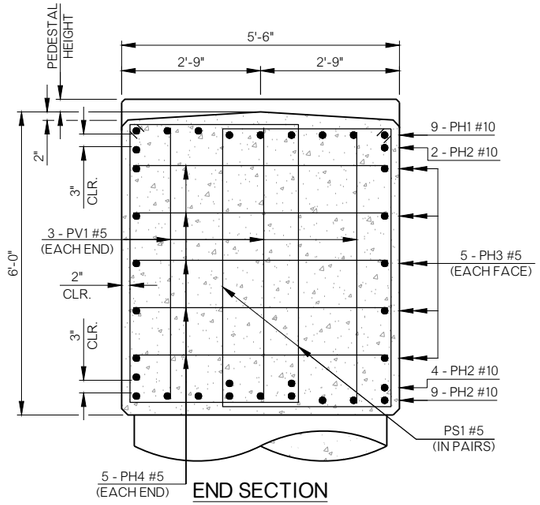
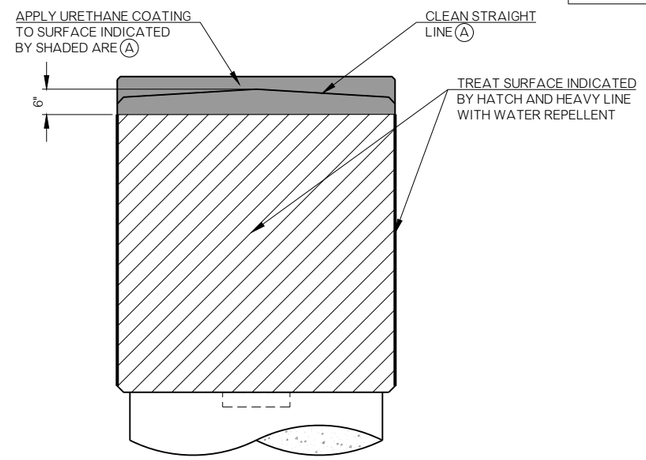


SECTION A-A



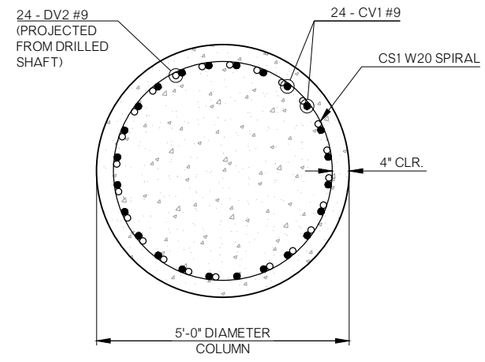
END SECTION



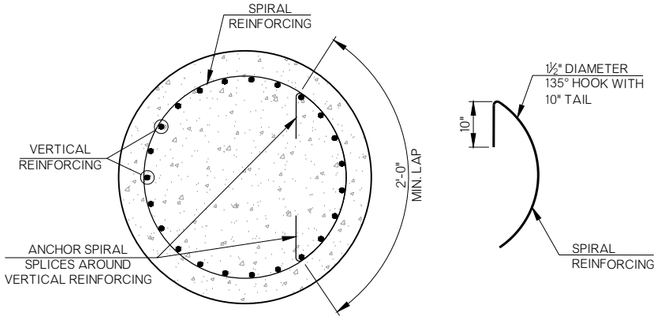
URETHANE COATING AND WATER REPELLENT TREATMENT DETAIL

(A) NOTES FOR URETHANE COATING

1. MASK FACE AND ENDS OF PIER CAP TO PROVIDE A CLEAN STRAIGHT FINISH AT EDGES OF URETHANE COATING APPLICATION.
2. APPLY URETHANE COATING TO SURFACE INDICATED BY SHADED AREAS, INCLUDING TOP OF PIER CAP, ALL SURFACES OF PEDESTALS, AND TO AN ELEVATION 6" BELOW THE TOP OF CAP AND SIDES AND ENDS. REMOVE COATING FROM ANY SURFACE OUTSIDE OF THE AREAS INDICATED IN THE PLANS. DO NOT APPLY WATER REPELLENT OR PAINT ON SURFACE PRIOR TO APPLICATION.
3. TREAT THE REMAINING SURFACE OF THE PIER WITH PENETRATING WATER REPELLENT SURFACE TREATMENT. AS SHOWN, THE WATER REPELLENT WILL SLIGHTLY OVERLAP THE URETHANE COATING

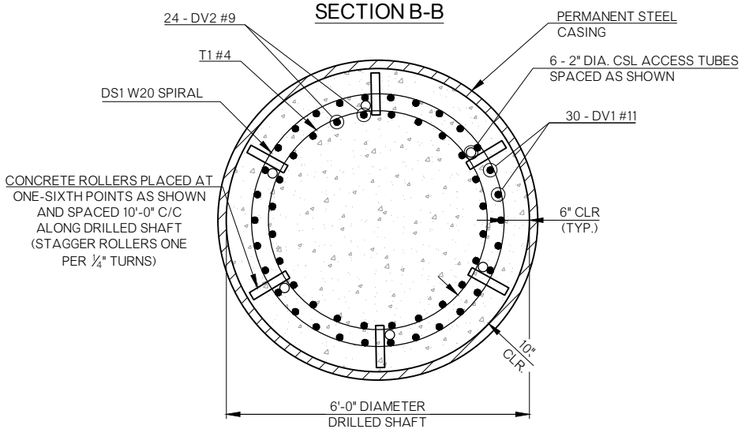


SECTION B-B



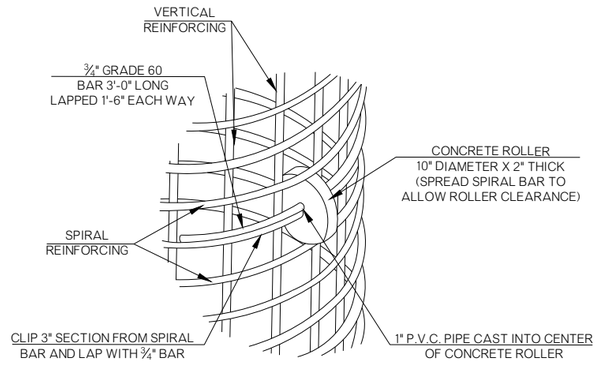
SECTION THRU COLUMN OR DRILLED SHAFT

DETAIL OF 135° HOOK



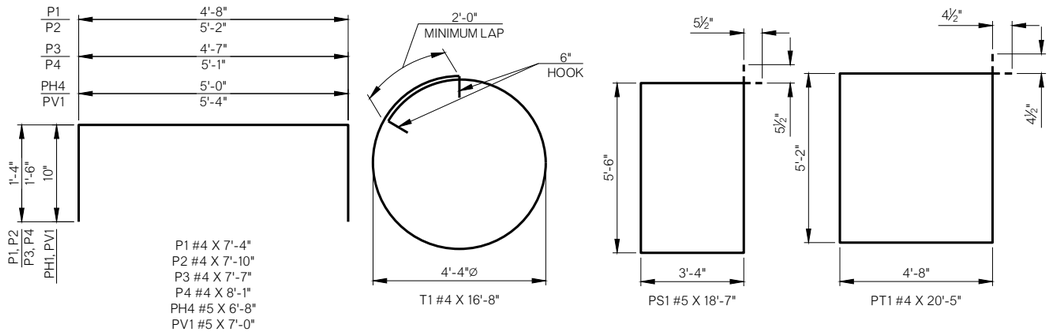
SECTION C-C

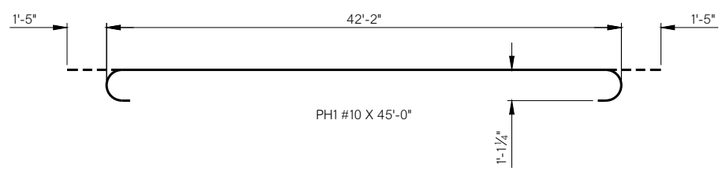
DETAIL OF SPIRAL REINFORCING SPLICE



DETAIL OF CONCRETE ROLLER INSTALLATION

NOTE:
CONCRETE USED IN THE CONCRETE ROLLER SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH OF 4,000 PSI. SLAB BOLSTERS, HIGH CHAIRS, OR PLASTIC ROLLERS SHALL NOT BE SUBSTITUTED FOR THE CONCRETE ROLLERS. COST OF CONCRETE ROLLERS SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FEET OF DRILLED SHAFT.





SH-94 OVER BEAVER RIVER BRIDGE "A"	TEXAS COUNTY	DESIGN	EBR	
PIER DETAILS (2 OF 2)		DETAIL	JFR	BFE
		CHECK	EBR	
STATE OF OKLAHOMA	DEPARTMENT OF TRANSPORTATION	JOB PIECE NO. 33323(04)	SHEET NO. B013	

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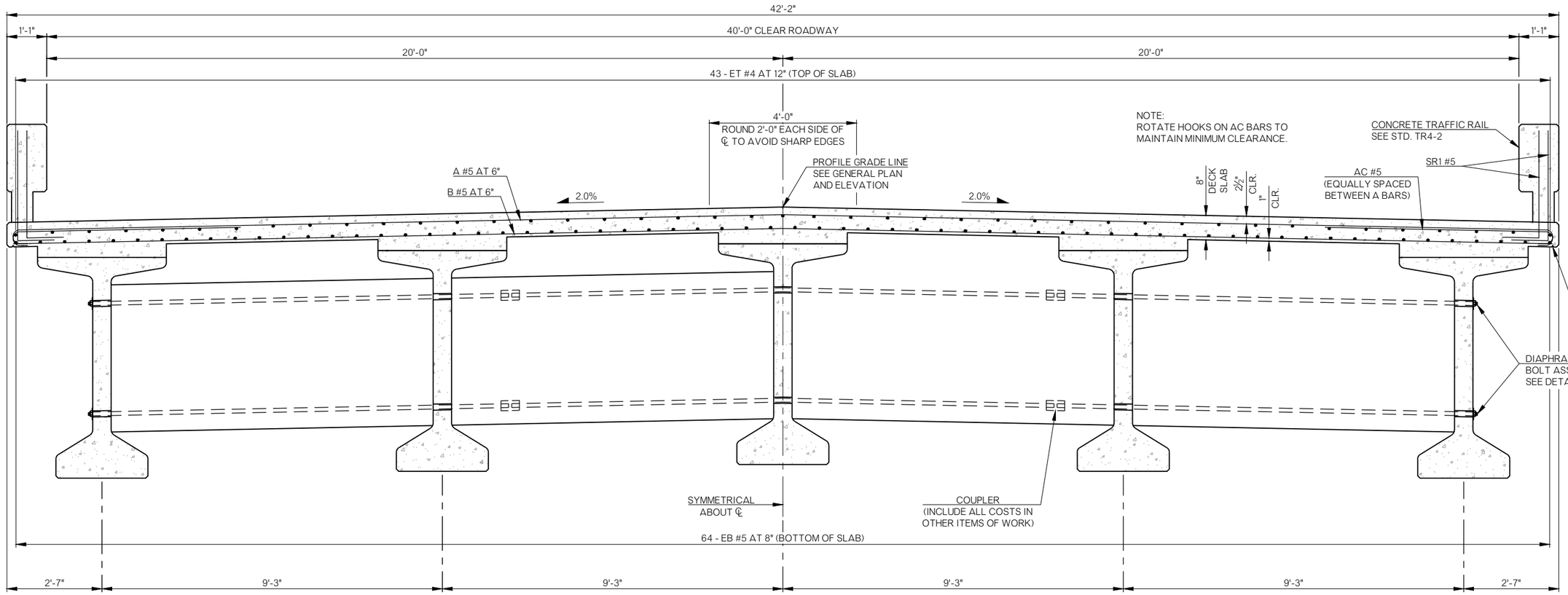
CEC // TRANSPORTATION

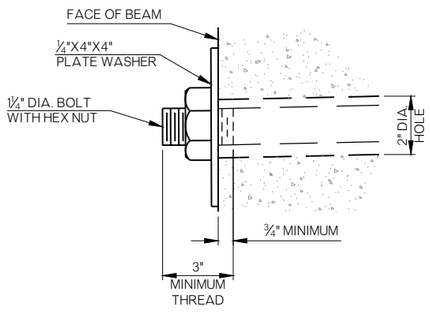
DESCRIPTION	REVISIONS	DATE



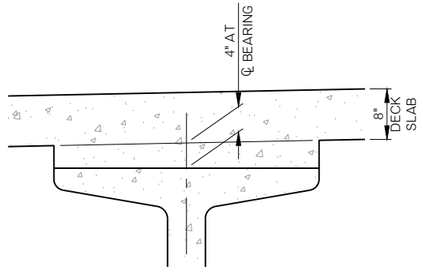
HALF SECTION AT INTERMEDIATE DIAPHRAGM

HALF SECTION AT END DIAPHRAGM

TYPICAL CROSS SECTION

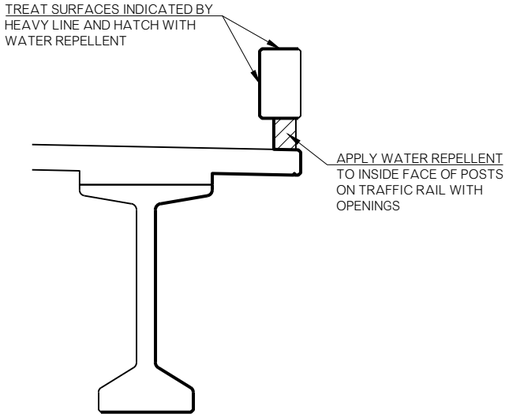


DETAIL A

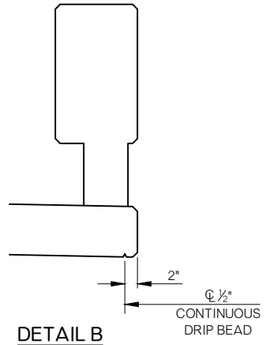


BEAM HAUNCH DETAIL

NOTE:
PLAN QUANTITIES FOR CLASS AA CONCRETE INCLUDE 35.6 C.Y. FOR BEAM HAUNCHES. THE HAUNCH HEIGHT SHOWN IS THE THEORETICAL HAUNCH HEIGHT AT THE CENTERLINE BEARING ONLY, MEASURED FROM THE BOTTOM OF THE DECK SLAB TO THE TOP OF THE BEAM, AND VARIES ACROSS THE SPAN. DETERMINE THE ACTUAL HAUNCH HEIGHT (ACCOUNTING FOR BEAM CAMBER, DEAD LOAD DEFLECTION AND ROADWAY GRADE) AFTER ERECTION OF THE BEAMS AND SUBMIT TO THE ENGINEER FOR APPROVAL. THE ENGINEER WILL NOT MEASURE DIFFERENCES BETWEEN THE THEORETICAL AND THE ACTUAL HAUNCH HEIGHTS FOR PAYMENT.



WATER REPELLENT TREATMENT DETAILS



DETAIL B

SH-94 OVER BEAVER RIVER
BRIDGE "A"
TEXAS COUNTY

SUPERSTRUCTURE DETAILS
(1 OF 7)

DESIGN	EBR	
DETAIL	BFE	JFR
CHECK	EBR	

CEC

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 33323(04)
SHEET NO. B014

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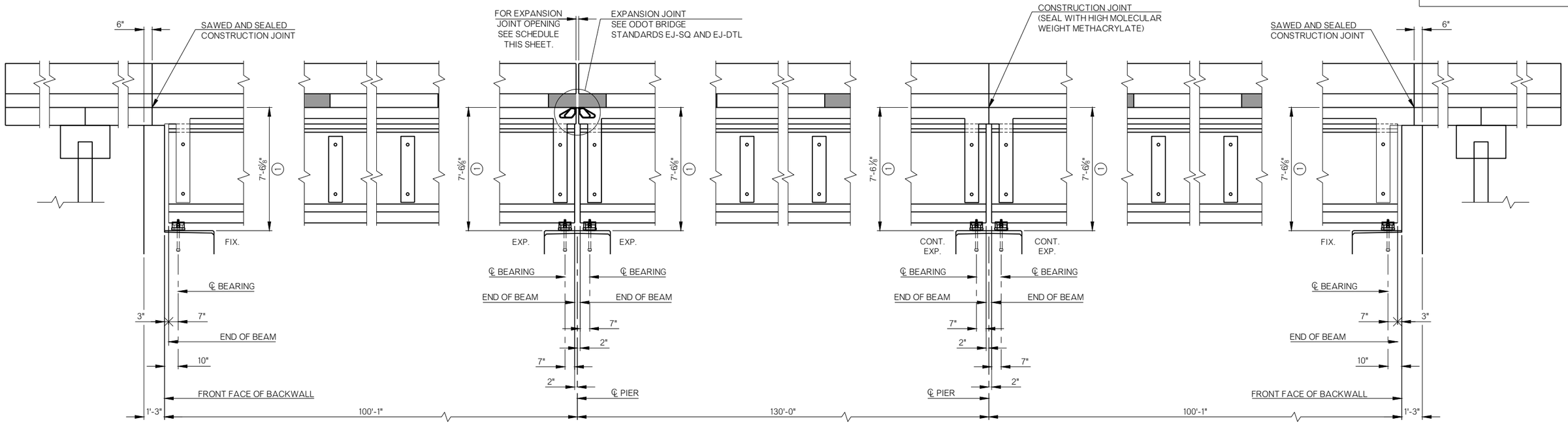
CEC // TRANSPORTATION

DESCRIPTION	REVISIONS	DATE



LONGITUDINAL SECTION

(1) DIMENSION IS FROM TOP OF DECK SLAB TO BOTTOM OF BEARING ASSEMBLY AT ℄ BEARING.

EXPANSION JOINT SETTING SCHEDULE

EXP. JOINT OPENING	TEMPERATURE (°F)
	PIER NO. 1
3"	1°
2⅞"	6°
2¾"	11°
2⅝"	17°
2½"	22°
2⅜"	27°
2¼"	32°
2⅛"	38°
2"	43°
1⅞"	48°
1¾"	54°
1⅝"	59°
1½"	64°
1⅜"	69°
1¼"	75°
1⅛"	80°
1"	85°
⅞"	91°
¾"	96°
⅝"	101°
½"	106°
⅜"	112°
¼"	117°

DECK SLAB NOTES

EPOXY-COAT OR GALVANIZE STEEL ITEMS USED TO FACILITATE CONSTRUCTION, SUCH AS DECK FORM HANGERS, TY-BAR CLIPS, INSERT WELD ANCHORS, OR OTHER APPURTENANCES, THAT WILL REMAIN IN PLACE IN THE DECK SLAB. EPOXY-COAT IN ACCORDANCE WITH AASHTO M284 OR GALVANIZE IN ACCORDANCE WITH AASHTO M111.

THE DECK SLAB SHALL BE POURED ONE SPAN AT A TIME IN ACCORDANCE WITH SECTION 504.04D OF THE SPECIFICATIONS. IN THE EVENT OF AN EMERGENCY, HALT THE PLACEMENT OF CONCRETE BY FORMING A CONSTRUCTION JOINT MADE PERPENDICULAR TO THE DIRECTION OF TRAFFIC OR AS DIRECTED BY THE ENGINEER. DO NOT PLACE ANY HEAVY EQUIPMENT ON THE FINISHED DECK SLAB WITHIN 5' OF ANY CONSTRUCTION JOINT UNTIL CONCRETE IS IN PLACE ON BOTH SIDES OF THE RESPECTIVE JOINT AND AT LEAST 48 HOURS HAS ELAPSED SINCE CONCRETE PLACEMENT.

SEAL ALL DECK SLAB CONSTRUCTION JOINTS, WITH HIGH MOLECULAR WEIGHT METHACRYLATE IN ACCORDANCE WITH SECTION 523 OF THE SPECIFICATIONS. INCLUDE ALL COST OF EQUIPMENT AND LABOR FOR THE INSTALLATION OF THE HIGH MOLECULAR WEIGHT METHACRYLATE SEALER IN THE CONTRACT UNIT PRICE OF "SEALER CRACK PREPARATION." INCLUDE ALL COSTS OF THE HIGH MOLECULAR WEIGHT METHACRYLATE SEALER IN THE CONTRACT UNIT PRICE OF "SEALER RESIN." THE DEPARTMENT WILL NOT MEASURE THE PREPARATION AND SEALER OF EMERGENCY CONSTRUCTION JOINTS FOR PAYMENT.

STAY-IN-PLACE DECK FORM NOTES

THE CONTRACTOR MAY USE STAY-IN-PLACE STEEL DECK FORMS IF THE MINIMUM DECK SLAB THICKNESS OF 8" IS OBTAINED BY MEASURING FROM THE TOP OF THE DECK SLAB TO THE TOP PORTION OF THE STEEL CORRUGATION. PREFORMED CORRUGATION FILLER, COMPOSED OF POLYSTYRENE OR OTHER MATERIAL, MAY BE USED IF BONDED TO THE DECK FORMS. NO ADDITIONAL CONCRETE WEIGHT OF THE DECK SLAB IS PERMITTED. THE TOTAL ADDITIONAL WEIGHT OF THE DECK FORM AND FILLER SHALL NOT EXCEED 5 P.S.F. THE DEPARTMENT CONSIDERS ALL COSTS OF STAY-IN-PLACE STEEL DECK FORMS TO BE INCLUDED IN THE CONTRACT UNIT PRICE OF "CLASS AA CONCRETE."

THE CONTRACTOR MAY SUBSTITUTE STAY-IN-PLACE PRESTRESSED CONCRETE DECK FORMS, AT NO ADDITIONAL COST TO THE DEPARTMENT, IF THE FOLLOWING CONDITIONS ARE MET:

(1) THE BRIDGE ENGINEER APPROVES SHOP DRAWINGS AND STRUCTURAL CALCULATIONS FOR THE FORMS SUBMITTED BY THE CONTRACTOR.

(2) THE BRIDGE ENGINEER APPROVES NEW STRUCTURAL DESIGN, STRUCTURAL CALCULATIONS, AND A NEW REINFORCING SCHEDULE FOR THE DECK SLAB SUBMITTED BY THE CONTRACTOR.

(3) SHOP DRAWINGS, NEW DECK SLAB REINFORCING SCHEDULE, STRUCTURAL DESIGNS, AND CALCULATIONS ARE PREPARED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF OKLAHOMA.

DO NOT SAW-CUT WITHIN 6" OF CONSTRUCTION JOINTS.

DO NOT PLACE THE CONCRETE FOR THE DECK SLAB OR APPLY OTHER MASSIVE LOADS TO THE BEAMS OR DIAPHRAGMS UNTIL THE CONCRETE IN THE DIAPHRAGMS HAS BEEN IN PLACE A MINIMUM OF 10 DAYS OR AT THE DISCRETION OF THE ENGINEER. THE ENGINEER MAY APPROVE SHORTENED TIME IF THE BEAM AND DIAPHRAGM CONCRETE HAS ATTAINED 80% OF THE SPECIFIED COMPRESSIVE STRENGTH.

SH-94 OVER BEAVER RIVER
BRIDGE "A"
TEXAS COUNTY

SUPERSTRUCTURE DETAILS
(2 OF 7)

DESIGN	EBR	
DETAIL	BFE	JFR
CHECK	EBR	

CEC

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 33323(04)
SHEET NO. B015

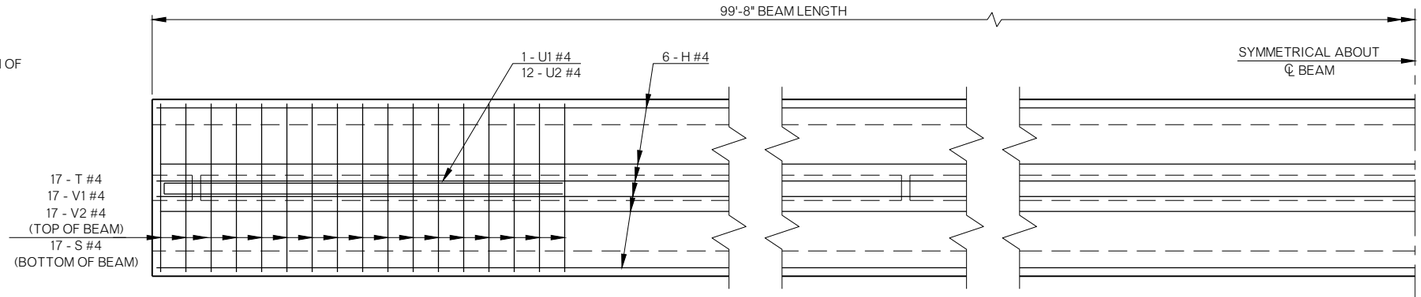
CEC // TRANSPORTATION

DESCRIPTION	REVISIONS	DATE

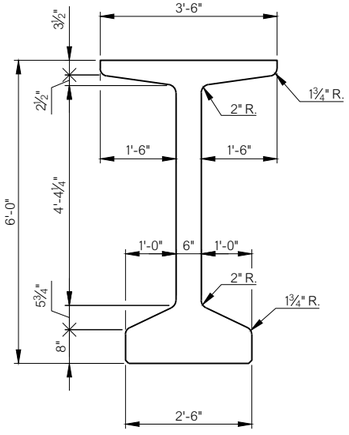
PRESTRESSED CONCRETE BEAM NOTES

COMPRESSIVE STRENGTH
PROVIDE CONCRETE WITH A COMPRESSIVE STRENGTH OF 5,250 P.S.I. AT TRANSFER OF PRESTRESS AND 7,000 P.S.I. AT 28 DAYS.

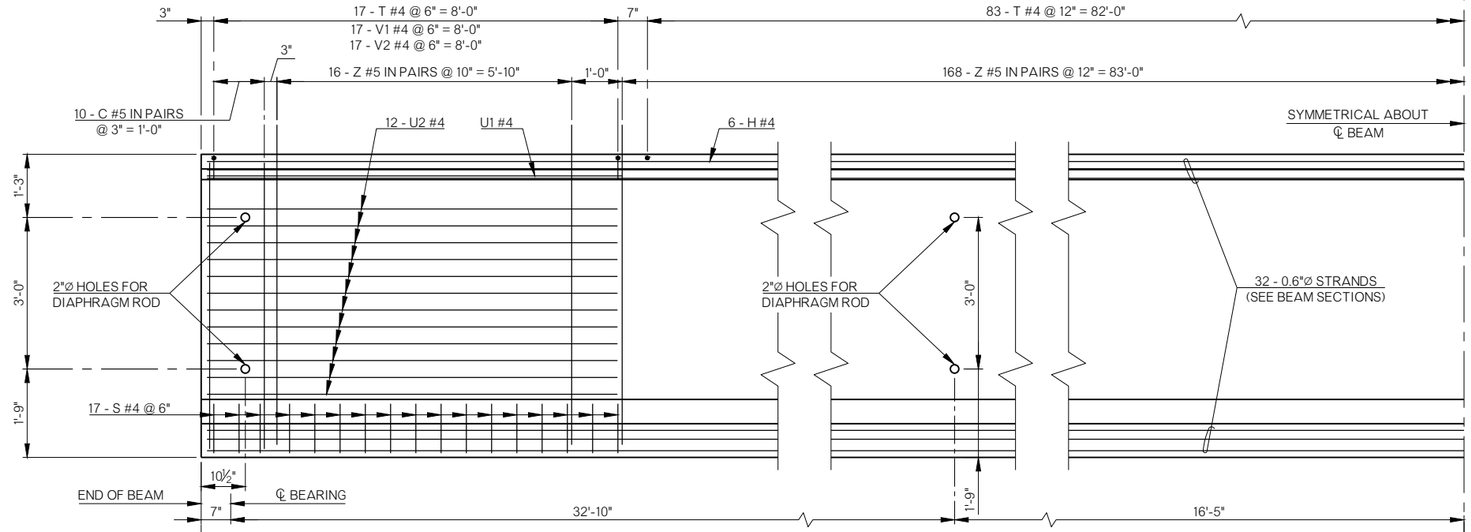
STRAND TYPE
PROVIDE LOW-RELAXATION STRANDS HAVING A NOMINAL DIAMETER OF 0.6" WITH ULTIMATE TENSILE STRENGTH OF 270 K.S.I.



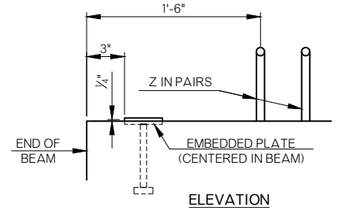
PLAN



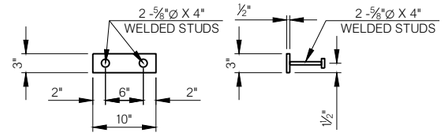
END VIEW



ELEVATION



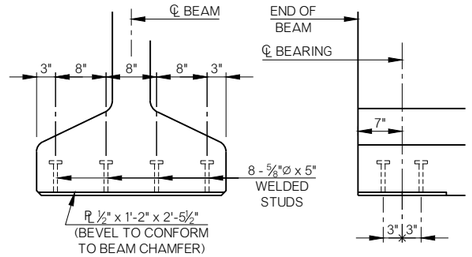
ELEVATION



TOP VIEW END VIEW

EMBEDDED BEAM PLATE DETAILS

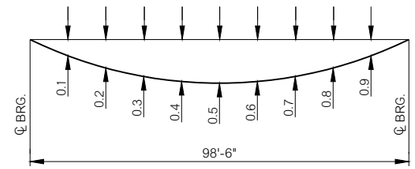
NOTE:
PROVIDE AN EMBEDDED BEAM PLATE AT EXPANSION ENDS ONLY.



END VIEW ELEVATION

EMBEDDED SOLE PLATE DETAILS

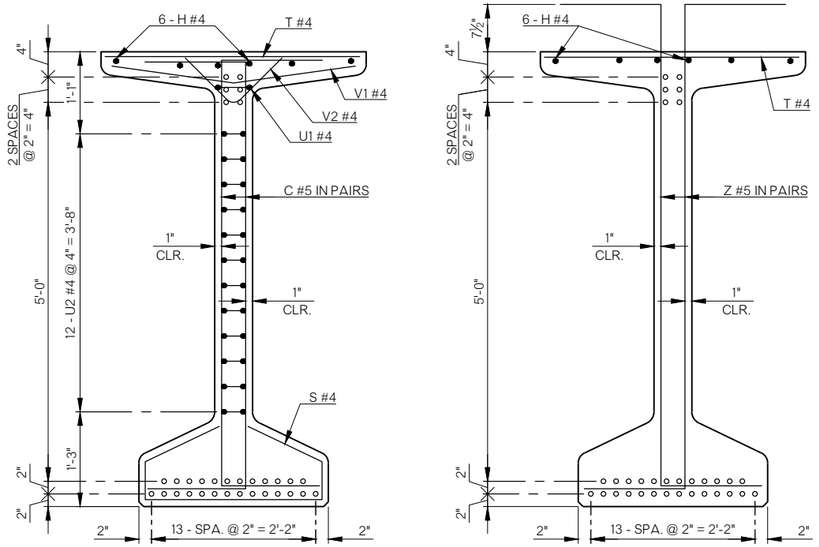
NOTE:
PROVIDE AN EMBEDDED SOLE PLATE AT EACH END OF BEAM.



DEAD LOAD DEFLECTION DIAGRAM

DEFLECTION TABLE						
BEAM	℄ BRG.	0.1 & 0.9	0.2 & 0.8	0.3 & 0.7	0.4 & 0.6	0.5
INTERIOR	0.00"	0.29"	0.55"	0.75"	0.88"	0.93"
EXTERIOR	0.00"	0.23"	0.43"	0.59"	0.69"	0.73"

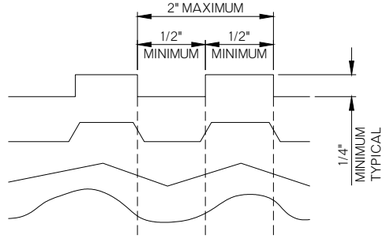
NOTE:
THE DEAD LOAD DEFLECTION SHOWN ABOVE AT THE TENTH POINTS ARE THE INITIAL DEFLECTIONS DUE TO THE DECK SLAB, DIAPHRAGMS, HAUNCH, S.I.P. FORMS, AND CONCRETE TRAFFIC RAIL. IT DOES NOT INCLUDE THE BEAM WEIGHT OR FUTURE WEARING SURFACE.



END SECTION

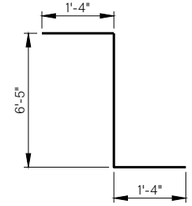
℄ SECTION

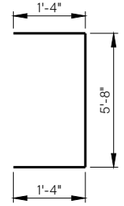
BEAM SECTIONS
(32 - 0.6"Ø STRANDS)

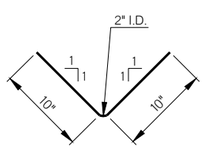


INTENTIONALLY ROUGHENED SURFACE DETAILS

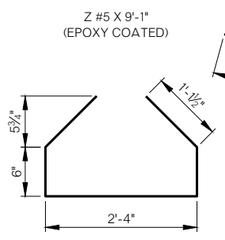
TOP SURFACE OF P.C. BEAMS SHALL BE INTENTIONALLY ROUGHENED TO A MINIMUM HEIGHT OF 1/4" OVER A MAXIMUM PITCH OF 2" MEASURED LONGITUDINALLY ALONG THE LENGTH OF THE BEAM. THE CREST AND TROUGH ASSOCIATED WITH THE HEIGHT SHALL NOT BE LESS THAN 1/2" AND SHALL EXTEND THE FULL WIDTH OF THE TOP FLANGE. PRODUCE THE ROUGHENED SURFACE BY USING A SPECIAL TROWEL TO FORM ONE OF THE SURFACES SHOWN IN THE DETAILS, BY CLEANING THE CONCRETE SURFACE WITH A STIFF WIRE BRUSH (OR BLASTING) TO THE EXTENT THAT AGGREGATE IS EXPOSED TO A HEIGHT OF 1/4", OR BY ANOTHER APPROVED METHOD. THE METHOD USED SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER. REPAIR ANY DAMAGE TO THE REINFORCEMENT'S EPOXY COATING BEFORE PLACEMENT OF DECK CONCRETE.



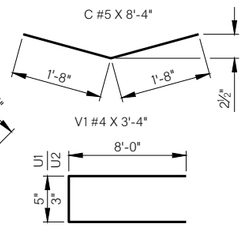




V2 #4 X 1'-8"



S #4 X 5'-7"



U1 #4 X 16'-5"
U2 #4 X 16'-3"

SH-94 OVER BEAVER RIVER BRIDGE "A"	TEXAS COUNTY	DESIGN	EBR	
		DETAIL	BFE	JFR
SUPERSTRUCTURE DETAILS (3 OF 7)		CHECK	EBR	
		CBC		
STATE OF OKLAHOMA	DEPARTMENT OF TRANSPORTATION			
	JOB PIECE NO. 33323(04)		SHEET NO. B016	

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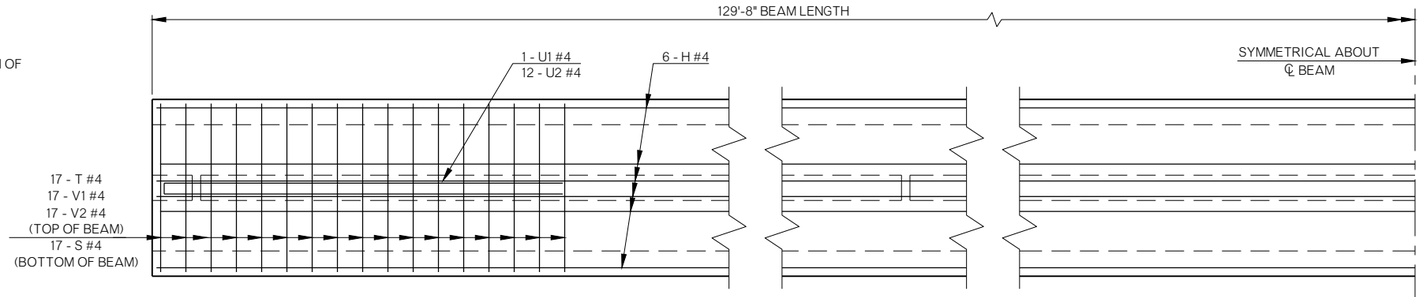
CEC // TRANSPORTATION

DESCRIPTION	REVISIONS	DATE

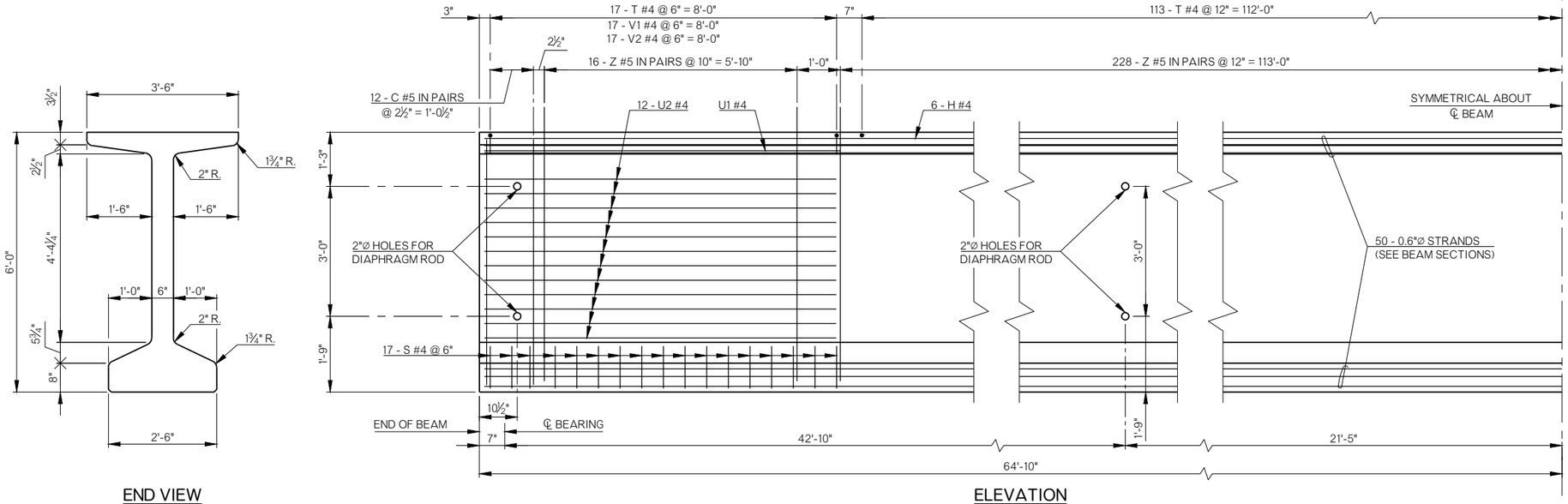
PRESTRESSED CONCRETE BEAM NOTES

COMPRESSIVE STRENGTH
PROVIDE CONCRETE WITH A COMPRESSIVE STRENGTH OF 7,000 P.S.I. AT TRANSFER OF PRESTRESS AND 10,000 P.S.I. AT 28 DAYS.

STRAND TYPE
PROVIDE LOW-RELAXATION STRANDS HAVING A NOMINAL DIAMETER OF 0.6" WITH ULTIMATE TENSILE STRENGTH OF 270 K.S.I.

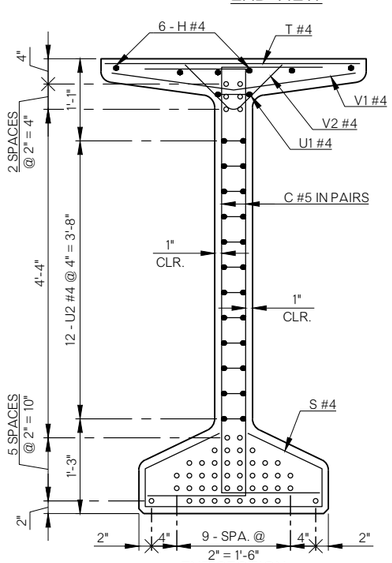


PLAN



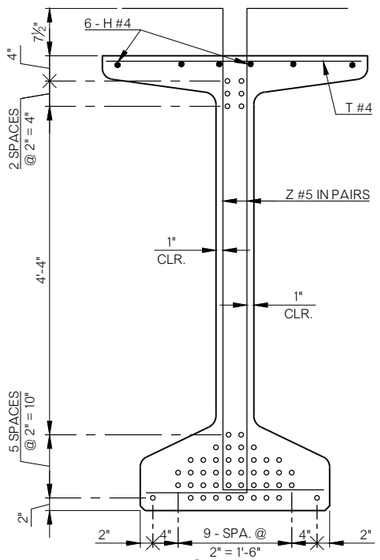
ELEVATION

END VIEW

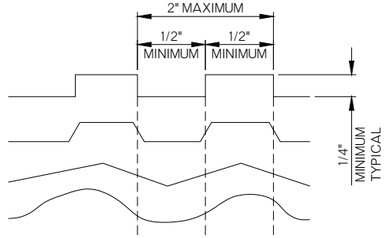


END SECTION

BEAM SECTIONS
(50 - 0.6"Ø STRANDS)



℄ SECTION



INTENTIONALLY ROUGHENED SURFACE DETAILS

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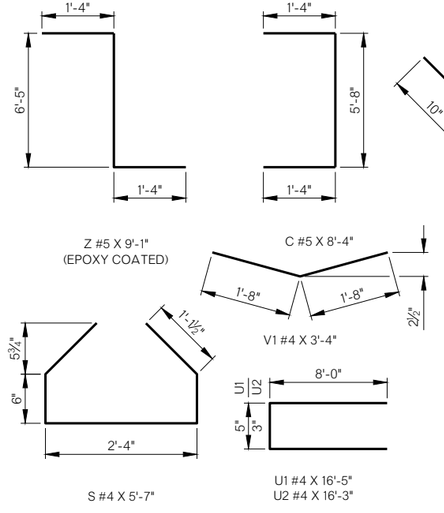
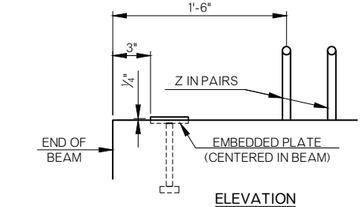
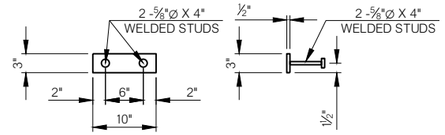




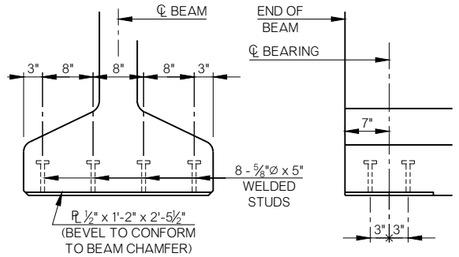
ELEVATION



TOP VIEW END VIEW

EMBEDDED BEAM PLATE DETAILS

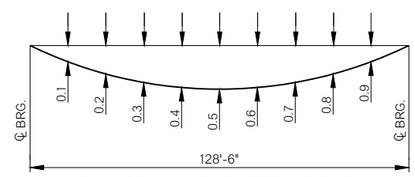
NOTE:
PROVIDE AN EMBEDDED BEAM PLATE AT EXPANSION ENDS ONLY.



END VIEW ELEVATION

EMBEDDED SOLE PLATE DETAILS

NOTE:
PROVIDE AN EMBEDDED SOLE PLATE AT EACH END OF BEAM.



DEAD LOAD DEFLECTION DIAGRAM

DEFLECTION TABLE						
BEAM	℄ BRG.	0.1 & 0.9	0.2 & 0.8	0.3 & 0.7	0.4 & 0.6	0.5
INTERIOR	0.00"	0.69"	1.31"	1.79"	2.1"	2.21"
EXTERIOR	0.00"	0.55"	1.04"	1.43"	1.67"	1.76"

NOTE:
THE DEAD LOAD DEFLECTION SHOWN ABOVE AT THE TENTH POINTS ARE THE INITIAL DEFLECTIONS DUE TO THE DECK SLAB, DIAPHRAGMS, HAUNCH, S.I.P. FORMS, AND CONCRETE TRAFFIC RAIL. IT DOES NOT INCLUDE THE BEAM WEIGHT OR FUTURE WEARING SURFACE.

SH-94 OVER BEAVER RIVER TEXAS COUNTY
BRIDGE "A"

SUPERSTRUCTURE DETAILS
(4 OF 7)

DESIGN	EBR	
DETAIL	BFE	JFR
CHECK	EBR	

CBC

STATE OF OKLAHOMA DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 33323(04) SHEET NO. B017

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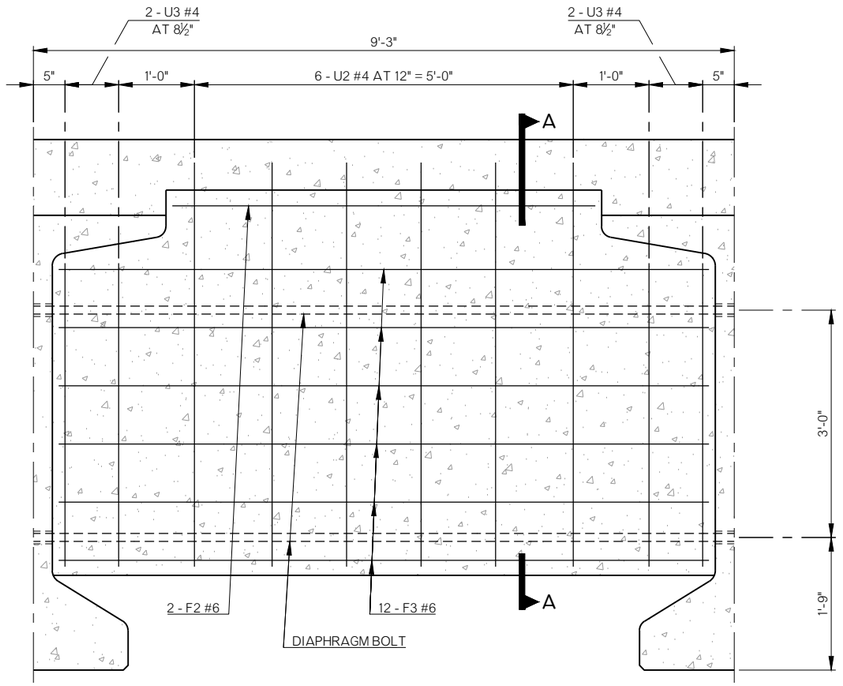
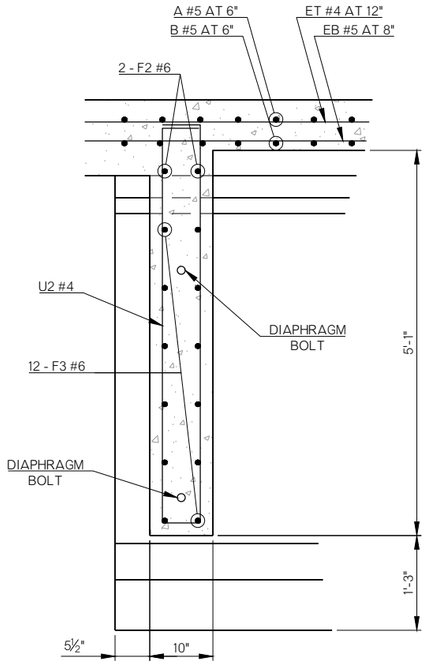
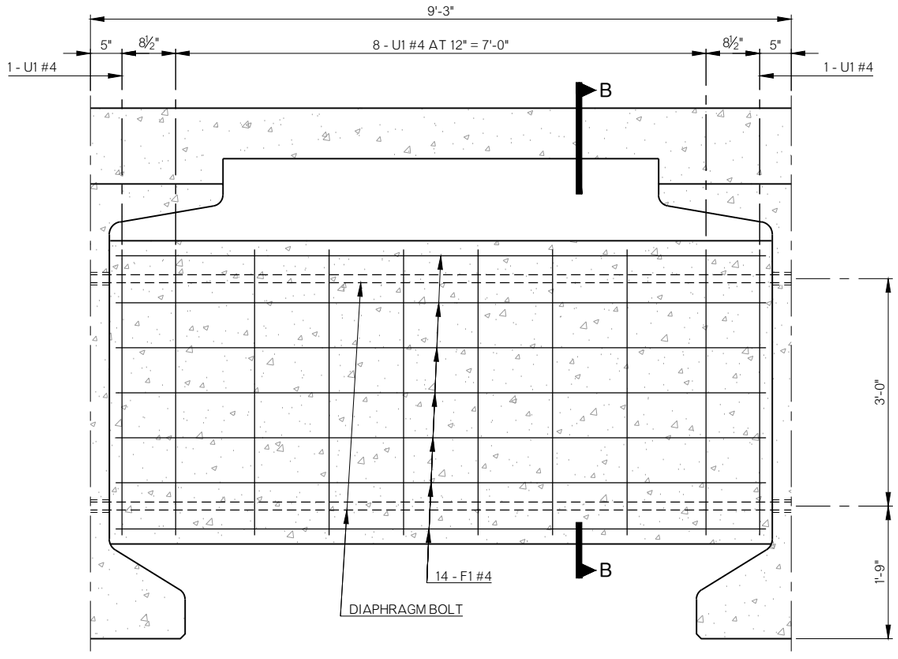


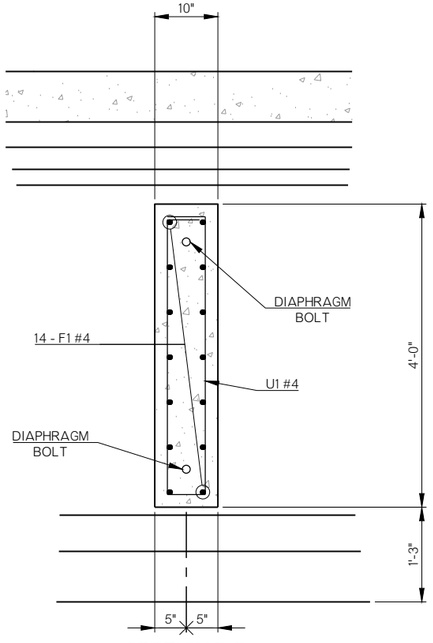
END DIAPHRAGM DETAILS



SECTION A-A



INTERMEDIATE DIAPHRAGM DETAILS



SECTION B-B

NOTE:
FOR BAR BENDS AND BAR LIST
SEE SHEET B020.

CEC // TRANSPORTATION

DESCRIPTION	REVISIONS	DATE

SH-94 OVER BEAVER RIVER
BRIDGE "A"

TEXAS COUNTY

SUPERSTRUCTURE DETAILS
(5 OF 7)

DESIGN	EBR	
DETAIL	BFE	JFR
CHECK	EBR	

CEC

STATE OF OKLAHOMA

DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 33323(04)

SHEET NO. B018

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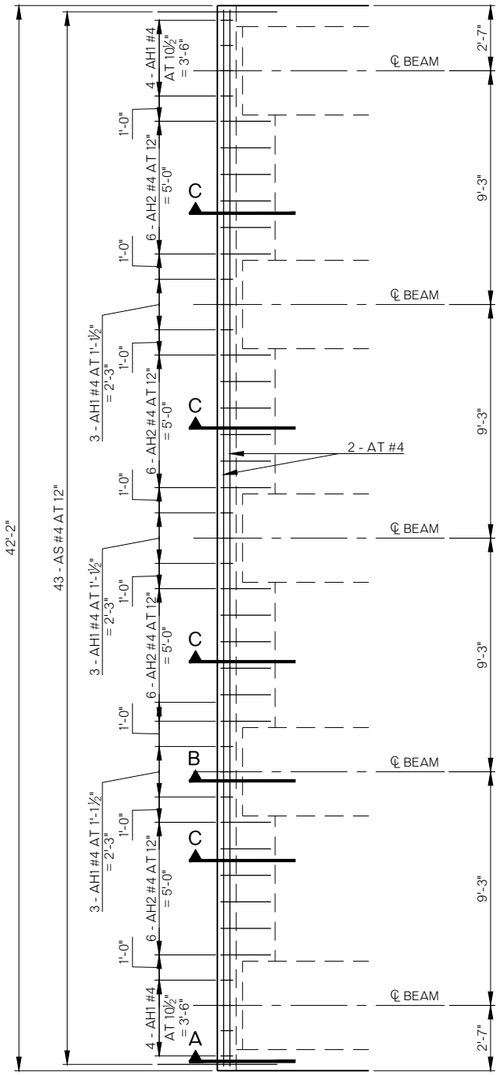
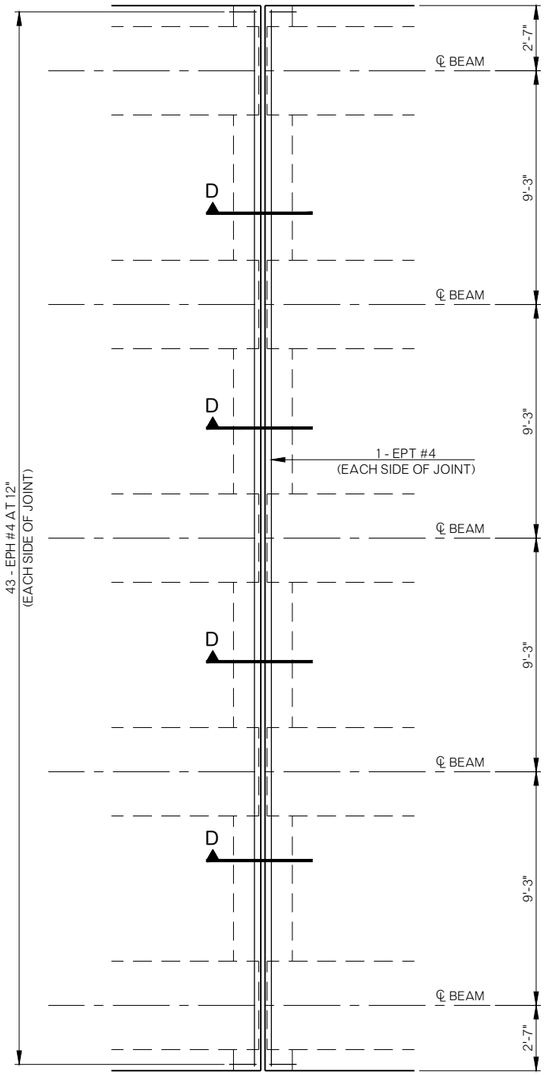


ABUTMENT NO. 1
(ABUTMENT NO. 2 SIMILAR)



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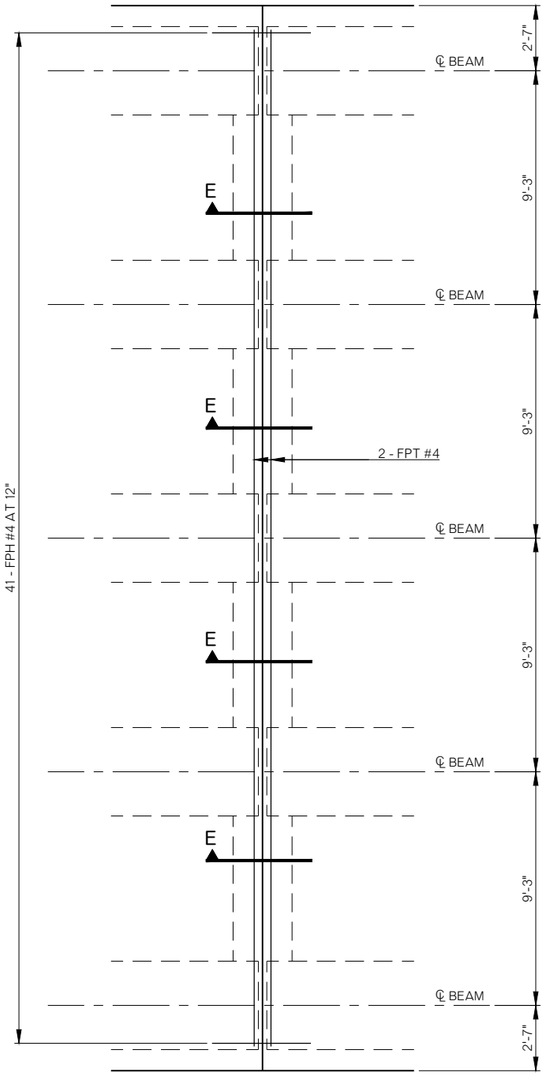
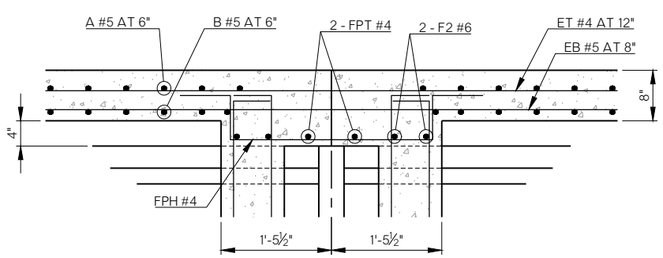


PIER NO. 2

ADDITIONAL SLAB REINFORCING AT DIAPHRAGM PLANS



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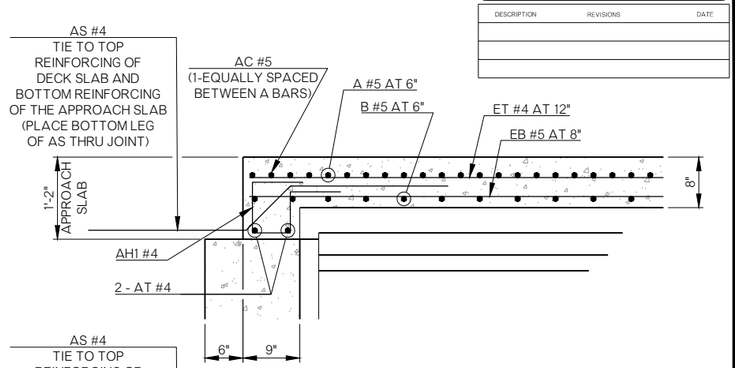

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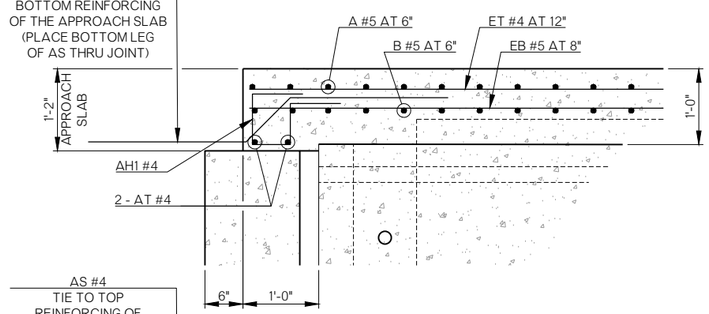

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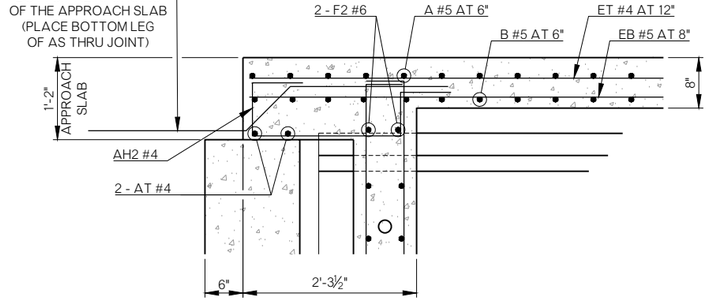

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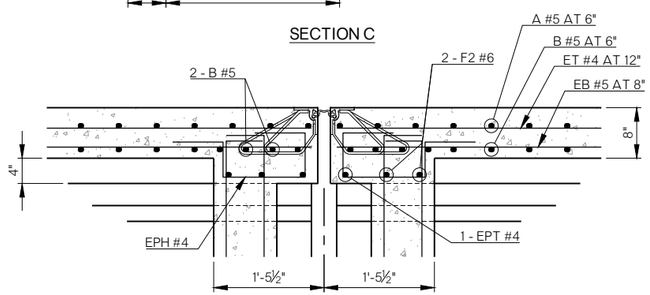

SECTION D

CEC // TRANSPORTATION

DESCRIPTION	REVISIONS	DATE

SH-94 OVER BEAVER RIVER
BRIDGE "A"

TEXAS COUNTY

SUPERSTRUCTURE DETAILS
(6 OF 7)

DESIGN	EBR	
DETAIL	BFE	JFR
CHECK	EBR	

CEC

STATE OF OKLAHOMA

DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 33323(04)

SHEET NO. B019

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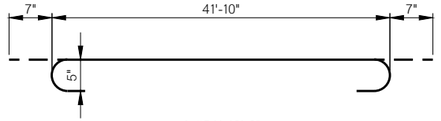
CEC // TRANSPORTATION

DESCRIPTION	REVISIONS	DATE

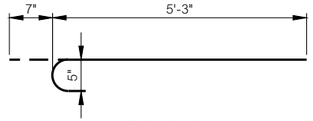
SUPERSTRUCTURE BAR LIST

	MARK	SIZE	NO.	FORM	LENGTH
	EPOXY COATED REINFORCING				
	A	#5	684	BNT.	43'-0"
	AC	#5	1,368	BNT.	5'-10"
	AH1	#4	34	BNT.	3'-3"
	AH2	#4	48	BNT.	4'-9"
	AS	#4	86	BNT.	5'-1"
	AT	#4	4	STR.	41'-10"
	B	#5	684	STR.	41'-10"
(1)	EB1	#5	64	STR.	103'-7"
(2)	EB2	#5	64	STR.	236'-9"
	EPH	#4	86	BNT.	3'-6"
	EPT	#4	2	STR.	41'-10"
(3)	ET1	#4	43	STR.	103'-1"
(4)	ET2	#4	43	STR.	235'-9"
	F1	#4	336	STR.	8'-5"
	F2	#6	48	STR.	5'-5"
	F3	#6	288	STR.	8'-5"
	FPH	#4	41	BNT.	5'-4"
	FPT	#4	2	STR.	40'-2"
(5)	SR1	#5	1,288	BNT.	4'-1"
	U1	#4	240	BNT.	8'-10"
	U2	#4	144	BNT.	12'-2"
	U3	#4	96	BNT.	9'-6"

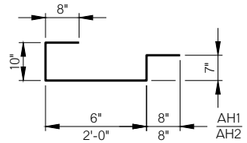
(1) INCLUDES 1 - 3'-0" MINIMUM LAP LENGTH
(2) INCLUDES 2 - 3'-0" MINIMUM LAP LENGTH
(3) INCLUDES 1 - 2'-6" MINIMUM LAP LENGTH
(4) INCLUDES 2 - 2'-6" MINIMUM LAP LENGTH
(5) FOR SR1 BAR BEND, SEE ODOT BRIDGE STANDARD TR4-2. FOR CONCRETE TRAFFIC RAIL ELEVATION, SEE ODOT BRIDGE STANDARD B40-C-TR4-0-1.



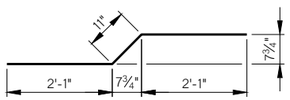
A #5 X 43'-0"



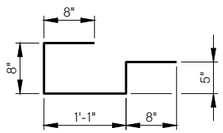
AC #5 X 5'-10"



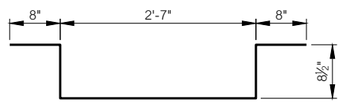
AH1 #4 X 3'-3"
AH2 #4 X 4'-9"



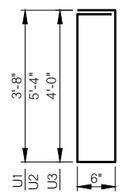
AS #4 X 5'-1"



EPH #4 X 3'-6"



FPH #4 X 5'-4"



U1 #4 X 8'-10"
U2 #4 X 12'-2"
U3 #4 X 9'-6"

SUPERSTRUCTURE QUANTITIES

ITEM	UNIT	TOTAL
PRESTRESSED CONCRETE BEAMS (TYPE J BT)	L.F.	1,645
SAW-CUT GROOVING	S.Y.	1,474.1
CONCRETE RAIL (TR4)	L.F.	663.4
STRUCTURAL STEEL	L.B.	3,890
STAINLESS STEEL FIXED BEARING ASSEMBLY	EA.	10
STAINLESS STEEL EXP. BEARING ASSEMBLY	EA.	20
CLASS AA CONCRETE	C.Y.	440.7
(SP) INTERNALLY CURED CONCRETE	S.F.	4,251.80
(SP) COLLOIDAL SILICA CONCRETE	S.F.	4,251.80
EPOXY COATED REINFORCING STEEL	LB.	116,990
WATER REPELLENT (VISUALLY INSPECTED)	S.Y.	1,233
SEALER EXPANSION JOINTS	L.F.	43.2
SEALER CRACK PREPARATION	L.F.	40.8
SEALER RESIN	GAL.	0.5

SH-94 OVER BEAVER RIVER
BRIDGE "A"

TEXAS COUNTY

SUPERSTRUCTURE DETAILS
(7 OF 7)

DESIGN	EBR	
DETAIL	BFE	JFR
CHECK	EBR	

CEC

STATE OF OKLAHOMA

DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 33323(04)

SHEET NO. B020

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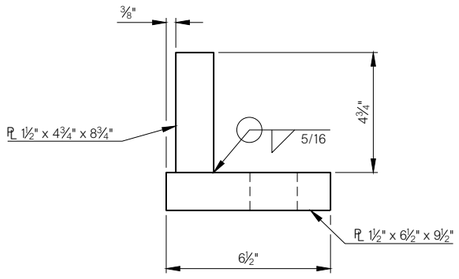
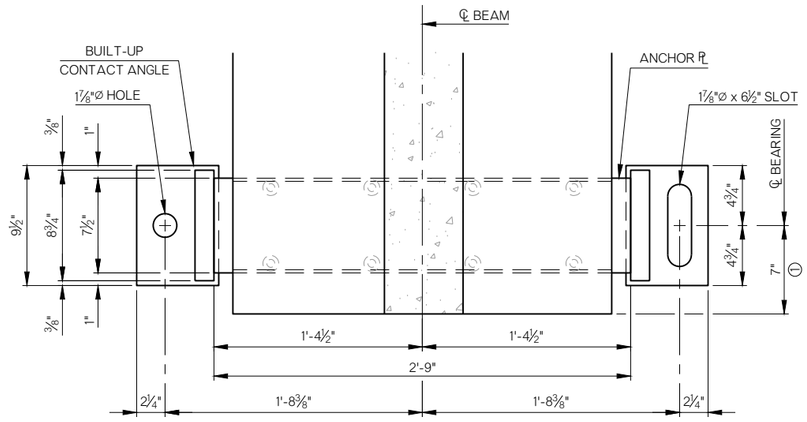
CEC // TRANSPORTATION

DESCRIPTION	REVISIONS	DATE



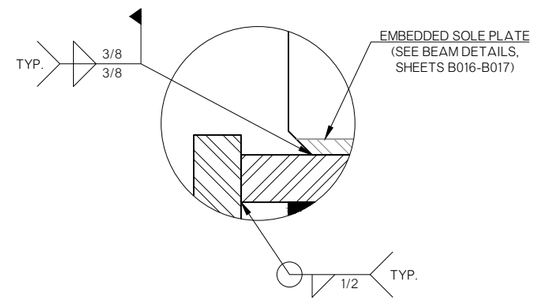
BUILT-UP CONTACT ANGLE DETAIL



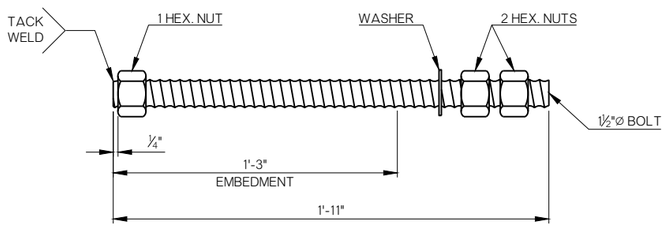
FIXED BEARING PLAN

EXPANSION BEARING PLAN

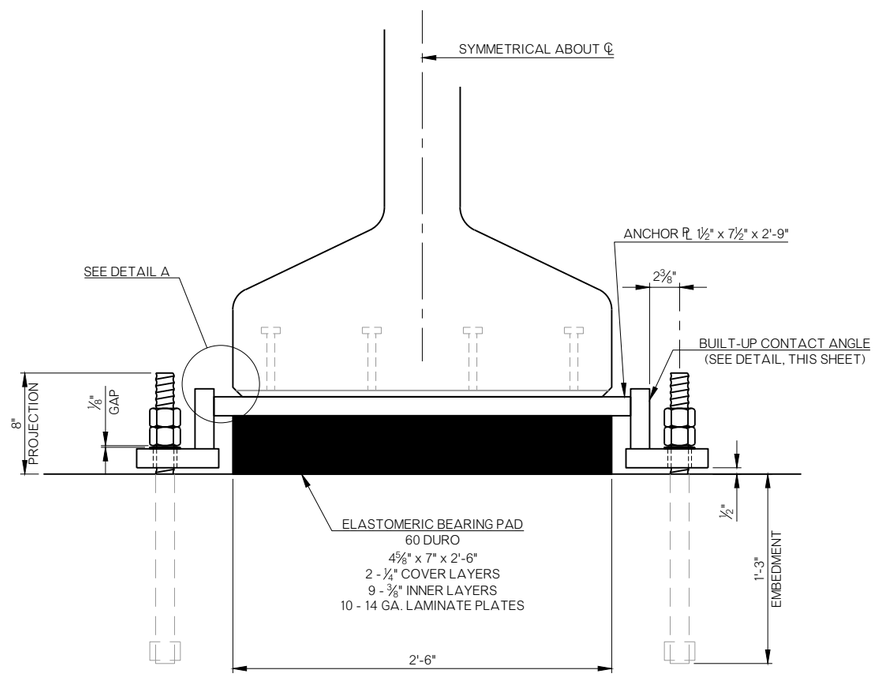
BEARING PLAN



DETAIL A

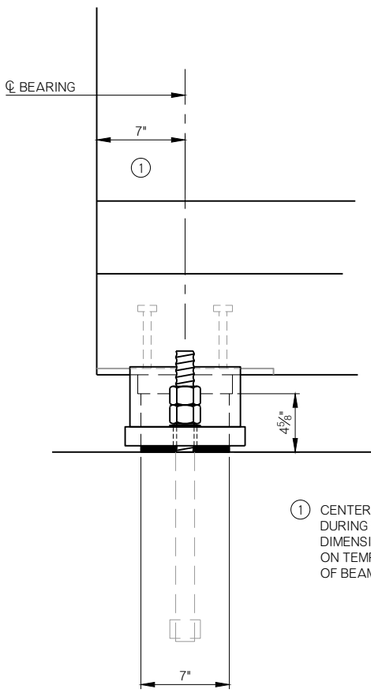


ANCHOR BOLT DETAIL



END VIEW

DO NOT BOND BEARING PAD TO THE ANCHOR PLATE.



SIDE VIEW

① CENTER ANCHOR BOLTS IN SLOTS DURING SETTING OF BEAMS. DIMENSION MAY VARY DEPENDING ON TEMPERATURE AT THE TIME OF BEAM SETTING.

BEARING DETAILS

SH-94 OVER BEAVER RIVER BRIDGE "A"	TEXAS COUNTY	DESIGN	EBR	
		DETAIL	BFE	JFR
BEARING DETAILS		CHECK	EBR	
		CEC		
STATE OF OKLAHOMA	DEPARTMENT OF TRANSPORTATION			
	JOB PIECE NO. 33323(04)		SHEET NO. B021	

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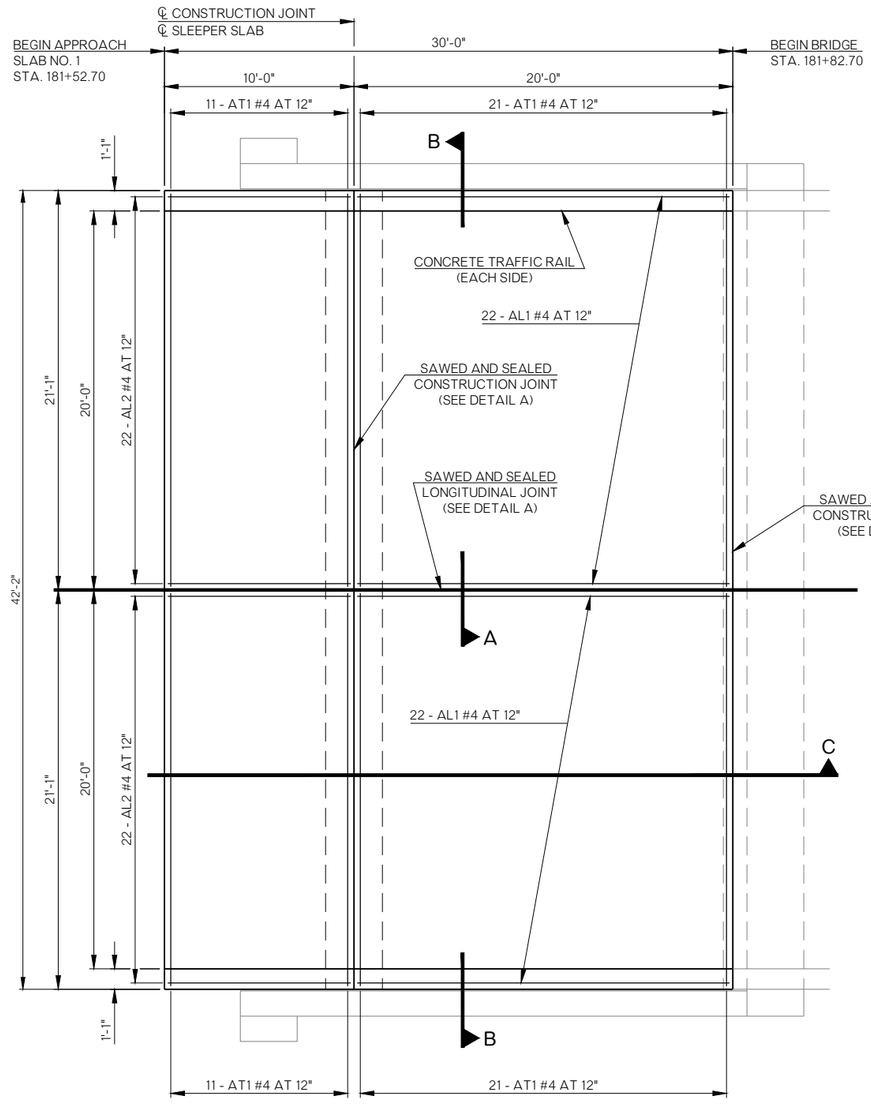
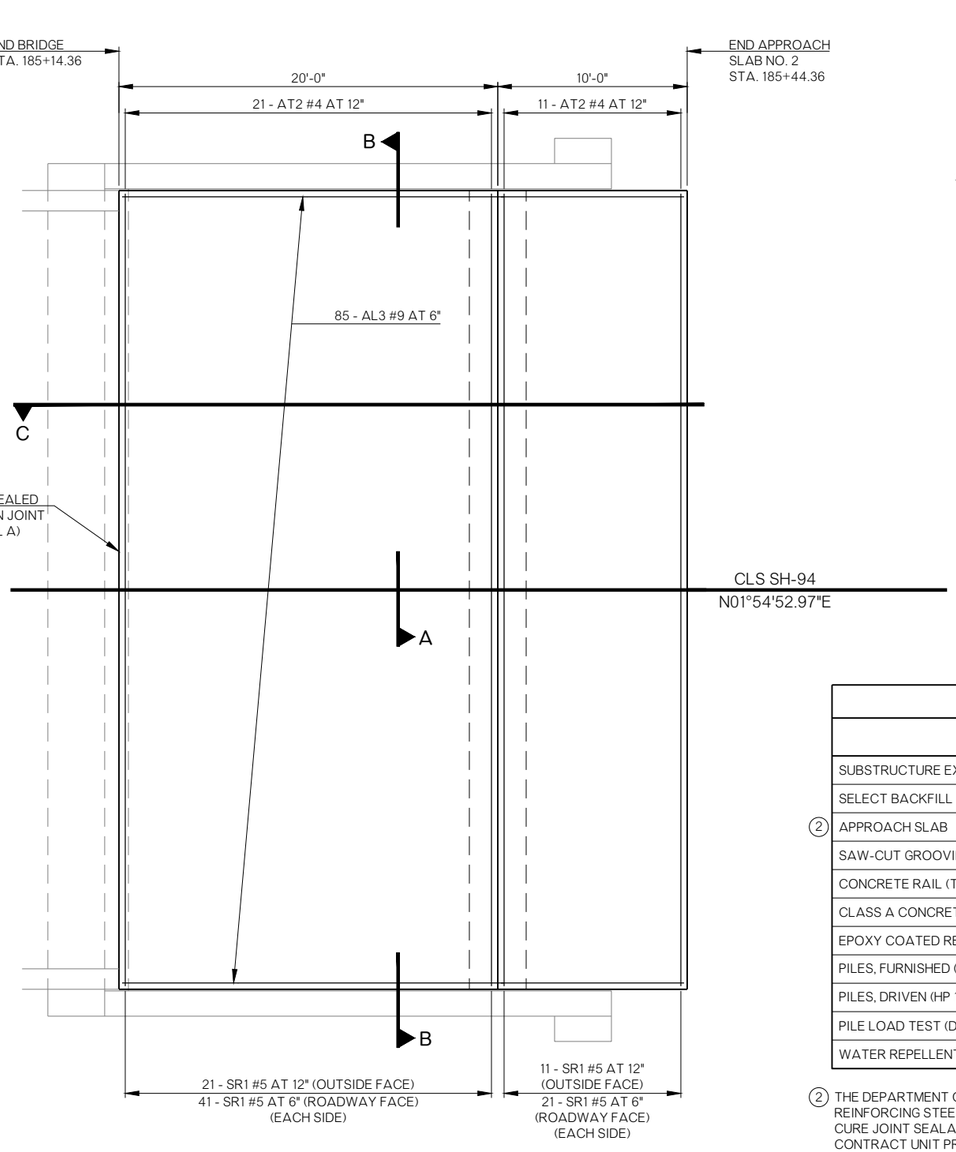


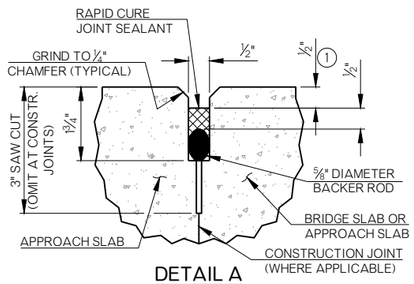
APPROACH SLAB - TOP MAT REINFORCING

(APPROACH SLAB NO. 1 SHOWN; APPROACH SLAB NO. 2 SIMILAR)



APPROACH SLAB - BOTTOM MAT REINFORCING

(APPROACH SLAB NO. 2 SHOWN; APPROACH SLAB NO. 1 SIMILAR)



DETAIL A

① THIS DIMENSION SHALL TAPER FROM ½" AT EDGE OF DRIVING LANE TO ⅛" AT PARAPET FOR TRANSVERSE JOINTS ONLY.

CEC // TRANSPORTATION

DESCRIPTION	REVISIONS	DATE

APPROACH SLAB BAR LIST
ONE SHOWN, TWO REQUIRED

MARK	SIZE	NO.	FORM	LENGTH
EPOXY COATED REINFORCING				
AL1	#4	44	STR.	19'-9"
AL2	#4	44	STR.	9'-9"
AL3	#9	85	STR.	29'-10"
AT1	#4	64	STR.	20'-9"
AT2	#4	32	STR.	41'-10"
③ SR1	#5	188	BNT.	4'-1"

APPROACH SLAB QUANTITIES

ITEM	UNIT	APP. SLAB NO. 1	APP. SLAB NO. 2	TOTAL
SUBSTRUCTURE EXCAVATION COMMON	C.Y.	15	15	30
SELECT BACKFILL	S.Y.	10	10	20
② APPROACH SLAB	S.Y.	140.6	140.6	281.2
SAW-CUT GROOVING	S.Y.	133.4	133.4	266.8
CONCRETE RAIL (TR4)	L.F.	60	60	120
CLASS A CONCRETE	C.Y.	9.4	9.4	18.8
EPOXY COATED REINFORCING STEEL	LB.	1,420	1,420	2,840
PILES, FURNISHED (HP 12X53)	L.F.	380	385	765
PILES, DRIVEN (HP 12X53)	L.F.	380	385	765
PILE LOAD TEST (DYNAMIC)	EA.	1	—	1
WATER REPELLENT (VISUALLY INSPECTED)	S.Y.	28	28	56

② THE DEPARTMENT CONSIDERS THE COST OF CLASS AA CONCRETE, EPOXY COATED REINFORCING STEEL (INCLUDING SR1 BARS), SAWED AND SEALED JOINTS, BACKER ROD, RAPID CURE JOINT SEALANT, POLYSTYRENE AND POLYETHYLENE SHEETING TO BE INCLUDED IN THE CONTRACT UNIT PRICE OF "APPROACH SLAB." THERE IS AN ESTIMATED 54.7 C.Y. OF CLASS AA CONCRETE AND AN ESTIMATED 12,080 LB. OF EPOXY COATED REINFORCING STEEL IN EACH APPROACH SLAB.

③ FOR SR1 BAR BEND, SEE ODOT BRIDGE STANDARD TR4-2.

NOTES:
PLACE REINFORCING IN THE TOP OF THE APPROACH SLAB 2" FROM EITHER SIDE OF THE SAWED AND SEALED LONGITUDINAL JOINT.

FOR APPROACH SLAB SECTION VIEWS, SEE SHEET B023.

FOR DETAILS OF SLEEPER SLAB, SEE SHEET B024.

SH-94 OVER BEAVER RIVER
BRIDGE "A"
TEXAS COUNTY

APPROACH SLAB DETAILS
(1 OF 3)

DESIGN	EBR	
DETAIL	JFR	BFE
CHECK	EBR	

CEC

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 33323(04)
SHEET NO. B022

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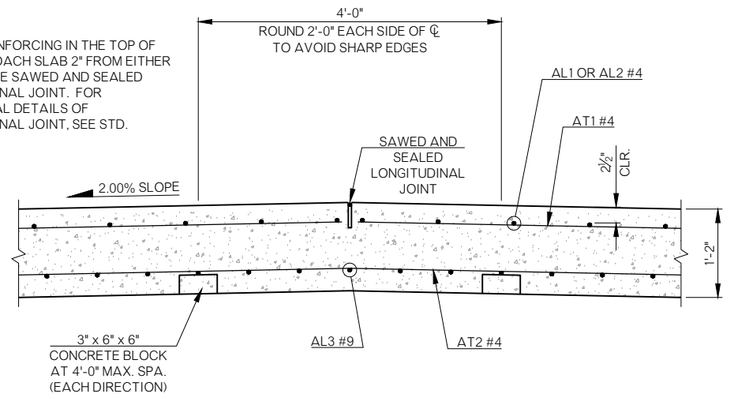
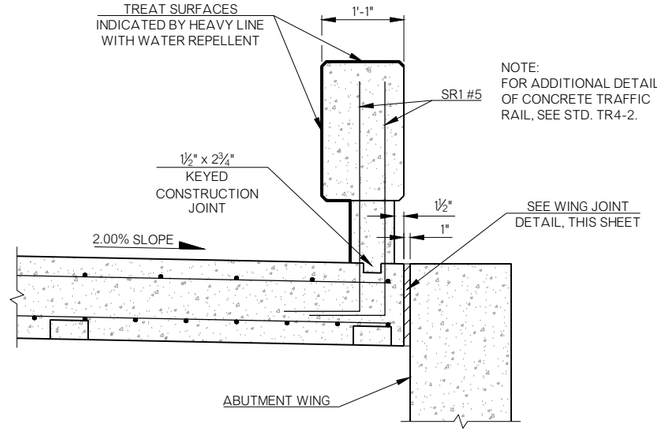
CEC // TRANSPORTATION

DESCRIPTION	REVISIONS	DATE

NOTE:
PLACE REINFORCING IN THE TOP OF THE APPROACH SLAB 2" FROM EITHER SIDE OF THE SAWED AND SEALED LONGITUDINAL JOINT. FOR ADDITIONAL DETAILS OF LONGITUDINAL JOINT, SEE STD. LECS-4.

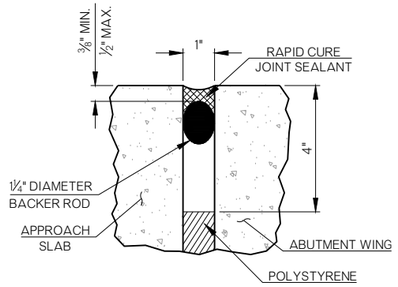


SECTION A

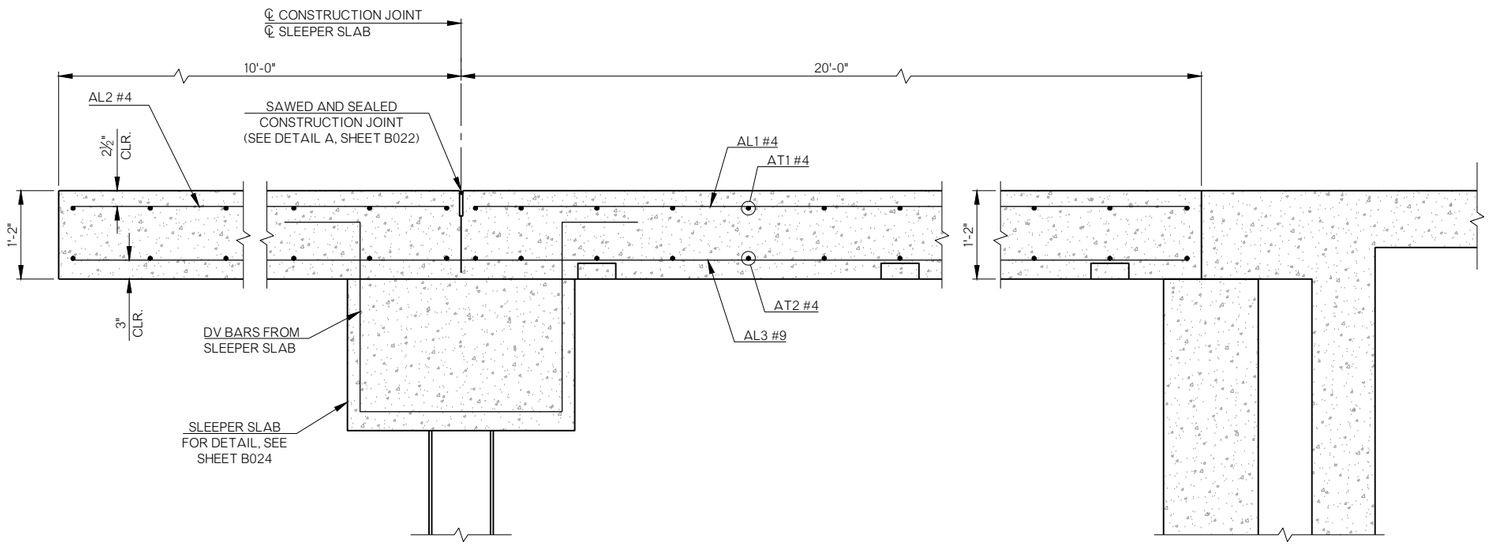


NOTE:
FOR ADDITIONAL DETAIL OF CONCRETE TRAFFIC RAIL, SEE STD. TR4-2.

SECTION B



WING JOINT DETAIL



SECTION C

SH-94 OVER BEAVER RIVER
BRIDGE "A"
TEXAS COUNTY

APPROACH SLAB DETAILS
(2 OF 3)

DESIGN	EBR	
DETAIL	BFE	JFR
CHECK	EBR	

CEC

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 33323(04)
SHEET NO. B023

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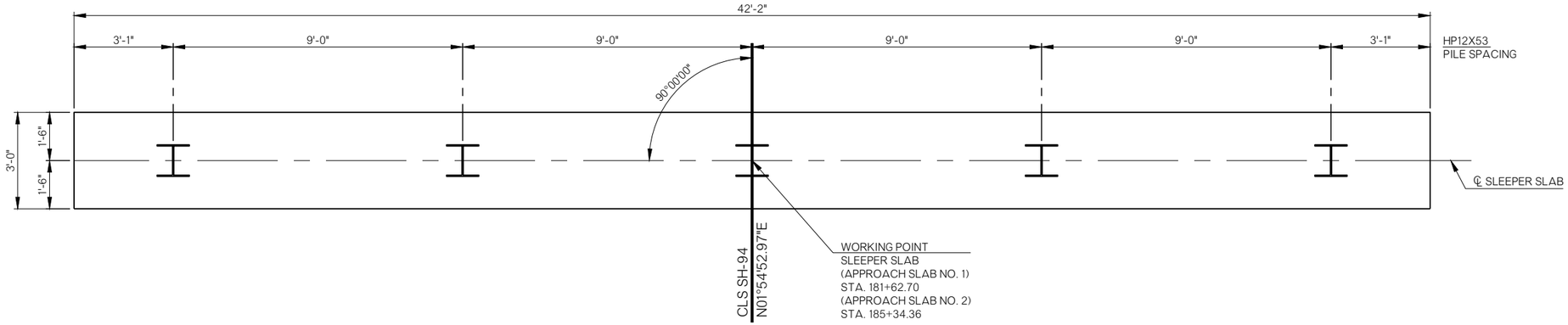
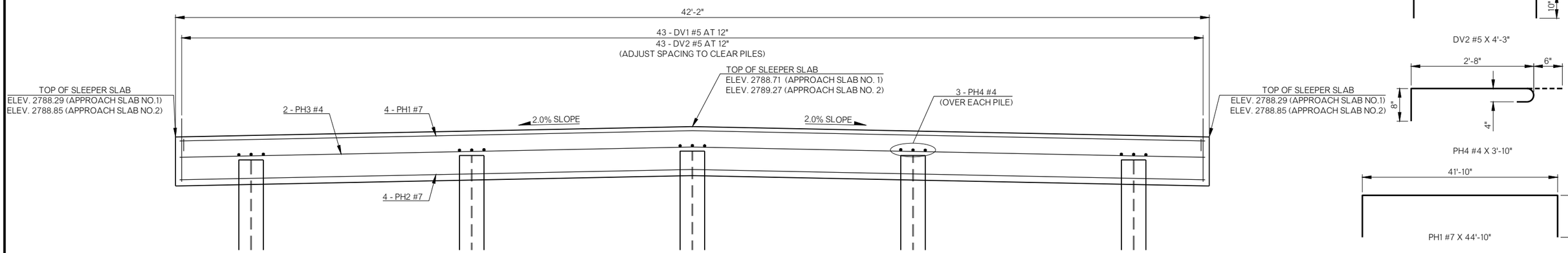
CEC // TRANSPORTATION

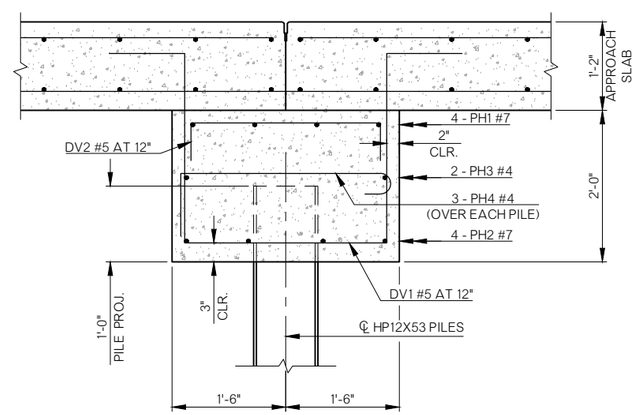
DESCRIPTION	REVISIONS	DATE



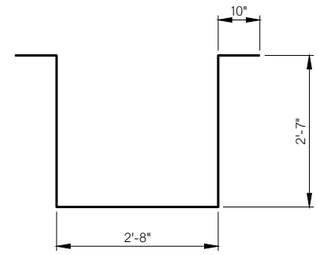
SLEEPER SLAB PLAN



SLEEPER SLAB ELEVATION



TYPICAL SECTION THRU SLEEPER SLAB



SLEEPER SLAB BAR LIST
ONE SHOWN, TWO REQUIRED

MARK	SIZE	NO.	FORM	LENGTH
EPOXY COATED REINFORCING				
DV1	#5	43	BNT.	9'-6"
DV2	#5	43	BNT.	4'-3"
PH1	#7	4	BNT.	44'-10"
PH2	#7	4	STR.	41'-10"
PH3	#4	2	STR.	41'-10"
PH4	#4	15	BNT.	3'-10"

SH-94 OVER BEAVER RIVER
BRIDGE "A"
TEXAS COUNTY

APPROACH SLAB DETAILS
(3 OF 3)

DESIGN	EBR	
DETAIL	BFE	JFR
CHECK	EBR	

CEC

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 33323(04)
SHEET NO. B024

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STORM WATER MANAGEMENT PLAN

CEC // TRANSPORTATION

REVISIONS

	DESCRIPTION	DATE
1	ADD RECEIVING WATER	01-18-2024

SITE DESCRIPTION

PROJECT LIMITS: BEGINNING NORTHEAST ON SH-94 APPROX. 2.8 MILES FROM THE US-412 AND SH-94 INTERSECTION. EXTENDING NORTH APPROX. 0.80 MILES.

PROJECT DESCRIPTION: BRIDGE AND APPROACH ROADWAY REPLACEMENT AND SH-94 RESURFACING.

SUGGESTED SEQUENCE OF EROSION CONTROL ACTIVITIES:

1. VEGETATIVE STRIPPING
2. UNDERCUT & STOCKPILE EXISTING TOPSOIL
3. INSTALL PERIMETER EROSION CONTROL MEASURES
4. ROADWAY EXCAVATION AND EMBANKMENT
5. CULVERT TRENCHING AND CONSTRUCTION
6. INSTALL TEMP. SEDIMENT FILTERS, SOD DITCHES, & VEGETATIVE MULCH
7. CONST. FINISHED ROADWAY PAVING
8. SPREAD TOPSOIL
9. INSTALL SOLID SLAB SOD

SOIL TYPE: SILTY SAND

TOTAL AREA OF THE CONSTRUCTION SITE: 24.01 AC.

ESTIMATED AREA TO BE DISTURBED: 13.00 AC.

OFFSITE AREA TO BE DISTURBED: (FOR CONTRACTOR USE)

TOTAL IMPERVIOUS AREA PRE-CONSTRUCTION: 1.88 AC.

TOTAL IMPERVIOUS AREA POST-CONSTRUCTION: 2.41 AC.

POST-CONSTRUCTION RUNOFF COEFFICIENT OF THE SITE: 0.37

LATITUDE & LONGITUDE OF CENTER OF PROJECT: 36°41'22" N, 101°12'20" W

PROJECT WILL DISCHARGE TO:

⚠ NAME OF RECEIVING WATERS: BEAVER RIVER AND LAKE OPTIMA

SENSITIVE WATERS OR WATERSHEDS:	YES [ ]	NO [X]
303(d) IMPAIRED WATERS:	YES [ ]	NO [X]
IF YES, LIST IMPAIRMENT:		
LOCATED IN A TMDL:	YES [ ]	NO [X]
LAKE THUNDERBIRD TMDL:	YES [ ]	NO [X]
MS4 ENTITY	YES [ ]	NO [X]
IF YES, LOCATION:		

NOTE:
THIS SHEET SHOULD BE USED IN CONJUNCTION WITH A DRAINAGE MAP THAT ILLUSTRATES THE DRAINAGE PATTERNS/PATHWAYS AND RECEIVING WATERS FOR THIS PROJECT. THIS SHEET SHOULD ALSO BE USED WITH THE EROSION CONTROL SUMMARIES, PAY ITEMS, & NOTES.

EROSION AND SEDIMENT CONTROLS

SOIL STABILIZATION PRACTICES:

- ____ TEMPORARY SEEDING
- _X_ PERMANENT SODDING, SPRIGGING OR SEEDING
- _X_ VEGETATIVE MULCHING
- ____ SOIL RETENTION BLANKET
- _X_ PRESERVATION OF EXISTING VEGETATION
- ____ HYDROMULCH / HYDROSEED

NOTE: TEMPORARY EROSION CONTROL METHODS MUST BE USED ON ALL DISTURBED AREAS WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR OVER 14 DAYS. METHODS USED WILL BE AS SHOWN ON PLANS, OR AS DIRECTED BY THE ENGINEER.

STRUCTURAL PRACTICES:

- ____ STABILIZED CONSTRUCTION EXIT
- _X_ TEMPORARY SILT FENCE
- _X_ TEMPORARY SILT DIKES
- ____ TEMPORARY FIBER LOG
- ____ DIVERSION, INTERCEPTOR OR PERIMETER DIKES
- ____ DIVERSION, INTERCEPTOR OR PERIMETER SWALES
- ____ ROCK FILTER DAMS
- ____ TEMPORARY SLOPE DRAIN
- ____ PAVED DITCH W/ DITCH LINER PROTECTION
- ____ TEMPORARY DIVERSION CHANNELS
- ____ TEMPORARY SEDIMENT BASINS
- ____ TEMPORARY SEDIMENT TRAPS
- ____ TEMPORARY SEDIMENT FILTERS
- ____ TEMPORARY SEDIMENT REMOVAL
- _X_ RIP RAP
- ____ INLET PROTECTION
- ____ TEMPORARY BRUSH SEDIMENT BARRIERS
- ____ SANDBAG BERMS
- ____ TEMPORARY STREAM CROSSINGS
- ____ FLEXAMAT / ARTICULATED CONCRETE BLOCK
- ____ COMPOST FILTER SOCKS
- ____ EROSION CONTROL MATS AND BLANKETS

OFFSITE VEHICLE TRACKING:

- _X_ HAUL ROADS DAMPENED FOR DUST CONTROL
- _X_ LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
- _X_ EXCESS DIRT ON ROAD REMOVED DAILY

NOTES:

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE FOLLOWING:

MAINTENANCE AND INSPECTION:

ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER FROM THE BEGINNING OF CONSTRUCTION UNTIL AN ACCEPTABLE VEGETATIVE COVER IS ESTABLISHED. INSPECTION BY THE CONTRACTOR AND ANY NECESSARY REPAIRS SHALL BE PERFORMED ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCH AS RECORDED BY A NON-FREEZING RAIN GAUGE TO BE LOCATED ON SITE. POTENTIALLY ERODIBLE AREAS, DRAINAGEWAYS, MATERIAL STORAGE, STRUCTURAL DEVICES, CONSTRUCTION ENTRANCES AND EXITS ALONG WITH EROSION AND SEDIMENT CONTROL LOCATIONS ARE EXAMPLES OF SITES THAT NEED TO BE INSPECTED.

WASTE MATERIALS:

PROPER MANAGEMENT AND DISPOSAL OF CONSTRUCTION WASTE MATERIAL IS REQUIRED BY THE CONTRACTOR. MATERIALS INCLUDE STOCKPILES, SURPLUS, DEBRIS AND ALL OTHER BY-PRODUCTS FROM THE CONSTRUCTION PROCESS. PRACTICES INCLUDE DISPOSAL, PROPER MATERIALS HANDLING, SPILL PREVENTION AND CLEANUP MEASURES. CONTROLS AND PRACTICES SHALL MEET THE REQUIREMENTS OF ALL FEDERAL, STATE AND LOCAL AGENCIES.

HAZARDOUS MATERIALS:

PROPER MANAGEMENT AND DISPOSAL OF HAZARDOUS WASTE MATERIALS IS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING MANUFACTURER'S RECOMMENDATIONS, STATE AND FEDERAL REGULATIONS TO ENSURE CORRECT HANDLING, DISPOSAL, SPILL PREVENTION AND CLEANUP MEASURES. EXAMPLES INCLUDE BUT ARE NOT LIMITED TO: PAINTS, ACIDS, CLEANING SOLVENTS, CHEMICAL ADDITIVES, CONCRETE CURING COMPOUNDS AND CONTAMINATED SOILS.

GENERAL NOTES:

A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED TO COMPLY WITH THE OKLAHOMA POLLUTION DISCHARGE ELIMINATION SYSTEM (OPDES) REGULATIONS. THIS PLAN IS INITIATED DURING THE DESIGN PHASE, CONFIRMED IN THE PRE-WORK MEETINGS AND AVAILABLE ON THE JOB SITE ALONG WITH COPIES OF THE NOTICE OF INTENT (NOI) FORM AND PERMIT CERTIFICATE THAT HAVE BEEN FILED WITH THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ). THE PLAN MUST BE KEPT CURRENT WITH UP-TO-DATE AMENDMENTS DURING THE PROGRESSION OF THE PROJECT. ALL CONTRACTOR OFF-SITE OPERATIONS ASSOCIATED WITH THE PROJECT MUST BE DOCUMENTED IN THE SWPPP, I.E., BORROW PITS, WORK ROADS, DISPOSAL SITES, ASPHALT/CONCRETE PLANTS, ETC. THE BASIC GOAL OF STORM WATER MANAGEMENT IS TO IMPROVE WATER QUALITY BY REDUCING POLLUTANTS IN STORM WATER DISCHARGES. RUNOFF FROM CONSTRUCTION SITES HAS A POTENTIAL FOR POLLUTION DUE TO EXPOSED SOILS AND THE PRESENCE OF HAZARDOUS MATERIALS USED IN THE CONSTRUCTION PROCESS. THE PREVENTION OF SOIL EROSION, CONTAINMENT OF HAZARDOUS MATERIALS AND/OR THE INTERCEPTION OF THESE POLLUTANTS BEFORE LEAVING THE CONSTRUCTION SITE ARE THE BEST PRACTICES FOR CONTROLLING STORM WATER POLLUTION.

THE FOLLOWING SECTIONS OF THE 2019 ODOT STANDARD SPECIFICATIONS SHOULD BE NOTED:

103.05	BONDING REQUIREMENTS
104.10	FINAL CLEANING UP
104.12	CONTRACTOR'S RESPONSIBILITY FOR WORK
104.13	ENVIRONMENTAL PROTECTION
106.08	STORAGE AND HANDLING OF MATERIAL
107.01	LAWS, RULES AND REGULATIONS TO BE OBSERVED
107.20	STORM WATER MANAGEMENT
220	MANAGEMENT OF EROSION, SEDIMENTATION, AND STORM WATER POLLUTION PREVENTION
221	TEMPORARY SEDIMENT CONTROL

IN ADDITION:

"ODEQ GENERAL PERMIT (OKR10) FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES WITHIN THE STATE OF OKLAHOMA." ODEQ, WATER QUALITY DIVISION, OCTOBER 18, 2022.

ADDITIONAL PERMITS REQUIRED FROM OKLAHOMA WATER RESOURCES BOARD

SH-94 TEXAS COUNTY

STORMWATER MANAGEMENT PLAN

JOB PIECE NO. 33323(04) SHEET NO. R001

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CEC // TRANSPORTATION

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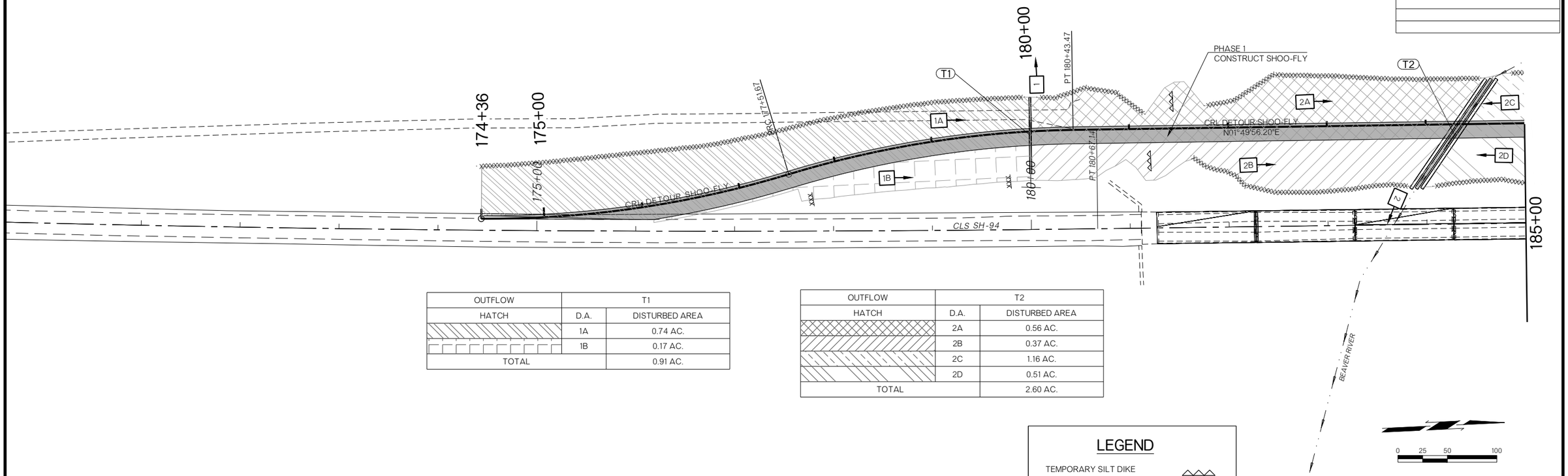
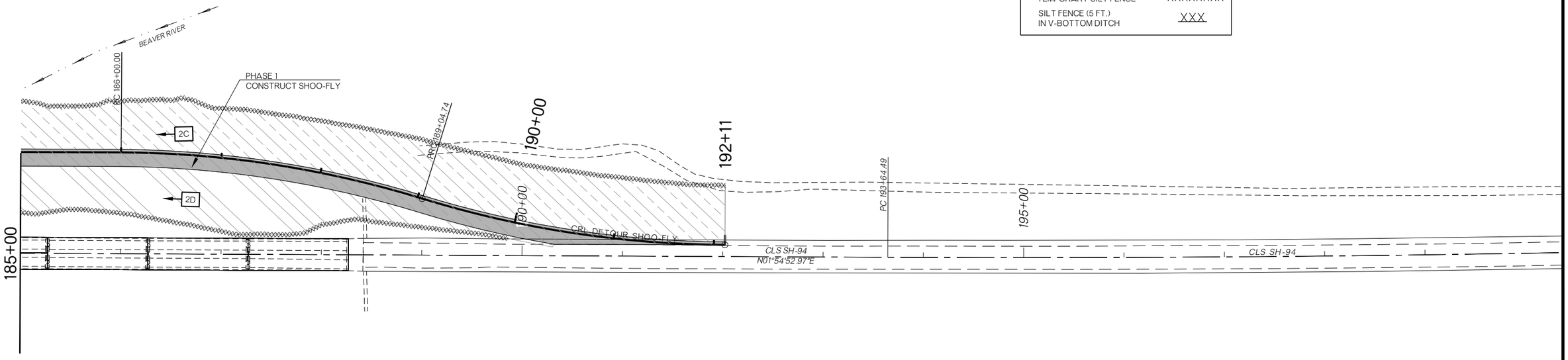


OUTFLOW	T1	
HATCH	D.A.	DISTURBED AREA
	1A	0.74 AC.
	1B	0.17 AC.
TOTAL		0.91 AC.

OUTFLOW	T2	
HATCH	D.A.	DISTURBED AREA
	2A	0.56 AC.
	2B	0.37 AC.
	2C	1.16 AC.
	2D	0.51 AC.
TOTAL		2.60 AC.

LEGEND

TEMPORARY SILT DIKE	
TEMPORARY SILT FENCE	XXXXXXXX
SILT FENCE (5 FT.) IN V-BOTTOM DITCH	XXX



SH-94 TEXAS COUNTY

EROSION CONTROL PHASE 1
SHEET 1 OF 1

JOB PIECE NO. 33323(04) SHEET NO. R002

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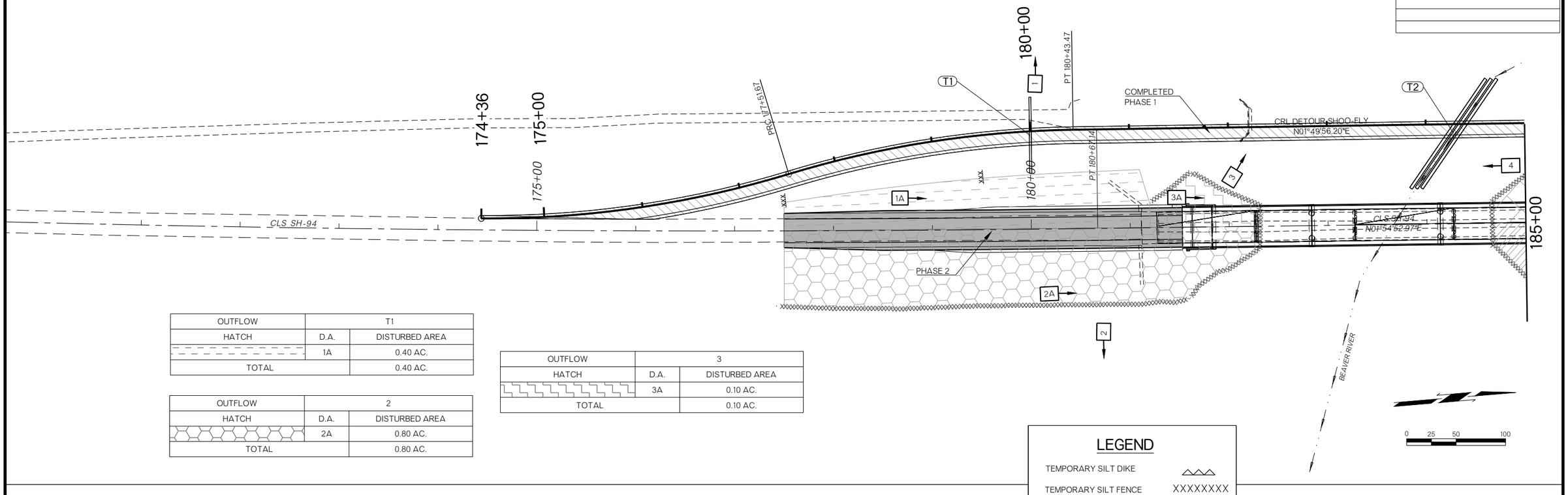


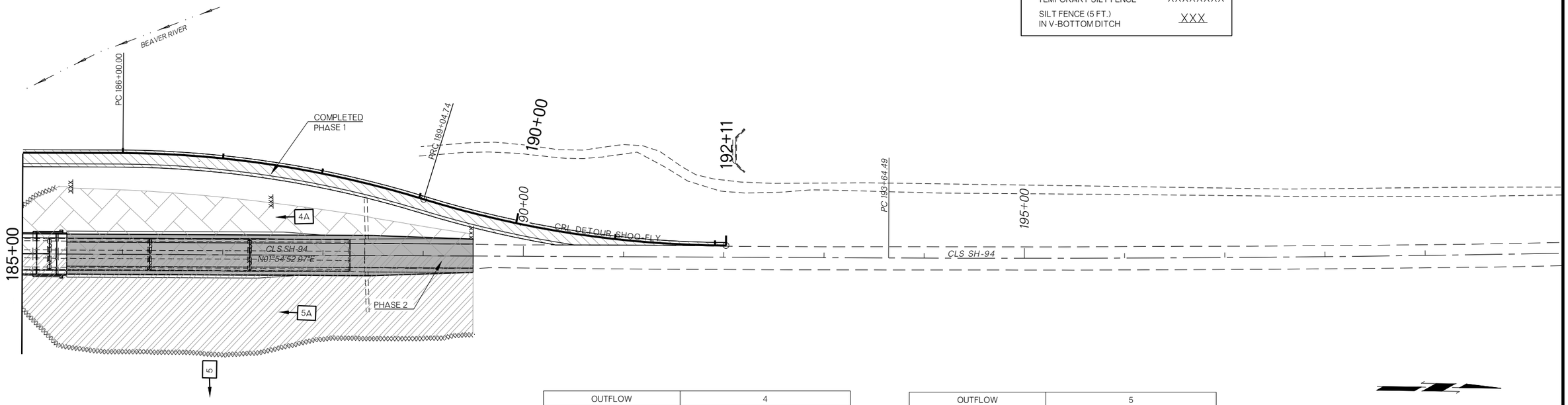
OUTFLOW	T1	
HATCH	D.A.	DISTURBED AREA
	1A	0.40 AC.
TOTAL		0.40 AC.

OUTFLOW	2	
HATCH	D.A.	DISTURBED AREA
	2A	0.80 AC.
TOTAL		0.80 AC.

OUTFLOW	3	
HATCH	D.A.	DISTURBED AREA
	3A	0.10 AC.
TOTAL		0.10 AC.

LEGEND

TEMPORARY SILT DIKE	
TEMPORARY SILT FENCE	XXXXXXXX
SILT FENCE (5 FT.) IN V-BOTTOM DITCH	XXX



OUTFLOW	4	
HATCH	D.A.	DISTURBED AREA
	4A	0.55 AC.
TOTAL		0.55 AC.

OUTFLOW	5	
HATCH	D.A.	DISTURBED AREA
	5A	0.95 AC.
TOTAL		0.95 AC.

SH-94 TEXAS COUNTY

EROSION CONTROL PHASE 2
SHEET 1 OF 1

JOB PIECE NO. 33323(04) SHEET NO. R003

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REVISIONS

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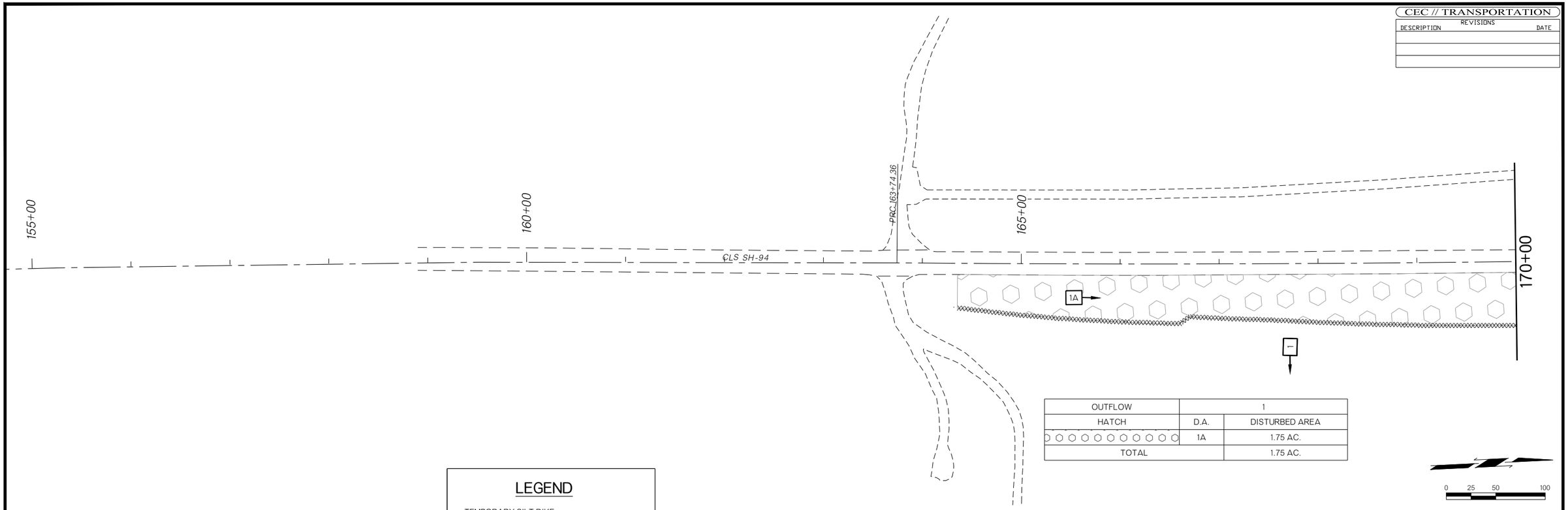
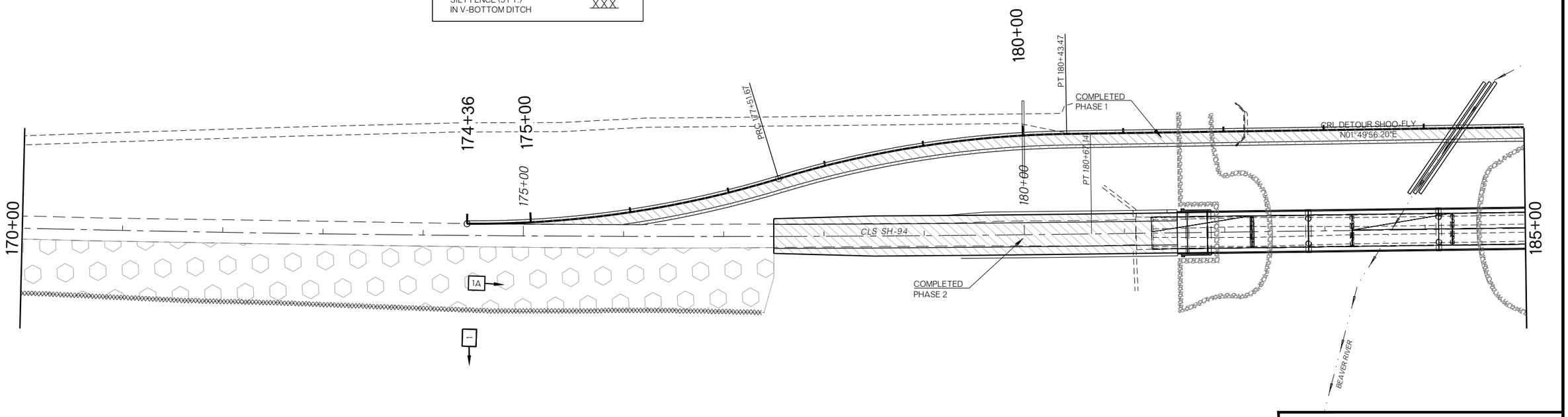


OUTFLOW	1	
HATCH	D.A.	DISTURBED AREA
	1A	1.75 AC.
TOTAL		1.75 AC.

0 25 50 100

LEGEND

TEMPORARY SILT DIKE	^^^
TEMPORARY SILT FENCE	XXXXXXXX
SILT FENCE (5 FT.) IN V-BOTTOM DITCH	XXX



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SH-94 TEXAS COUNTY

EROSION CONTROL PHASE 3
SHEET 1 OF 2

JOB PIECE NO. 33323(04) SHEET NO. R004

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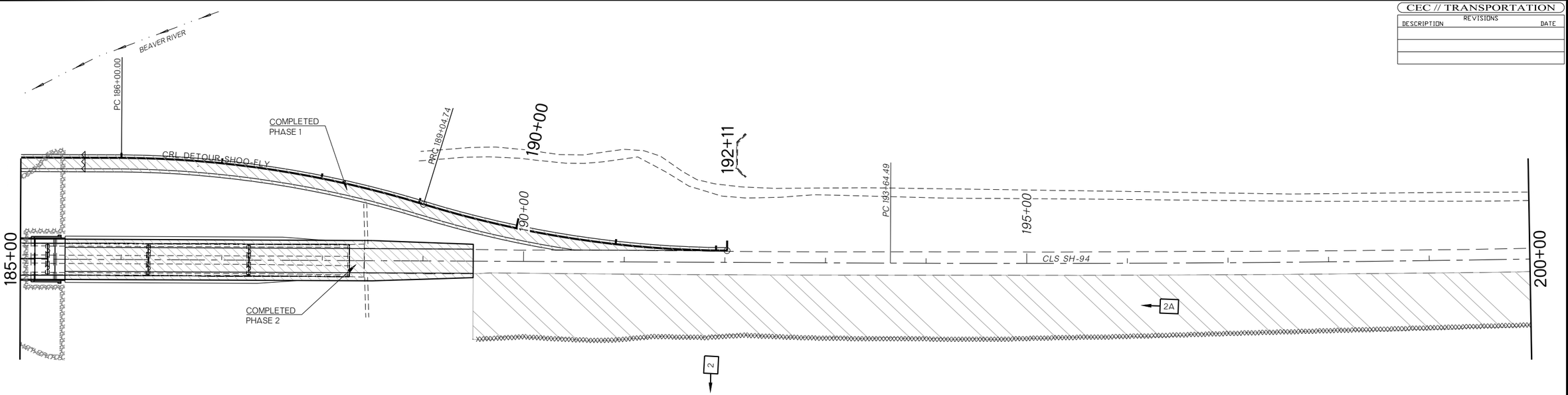
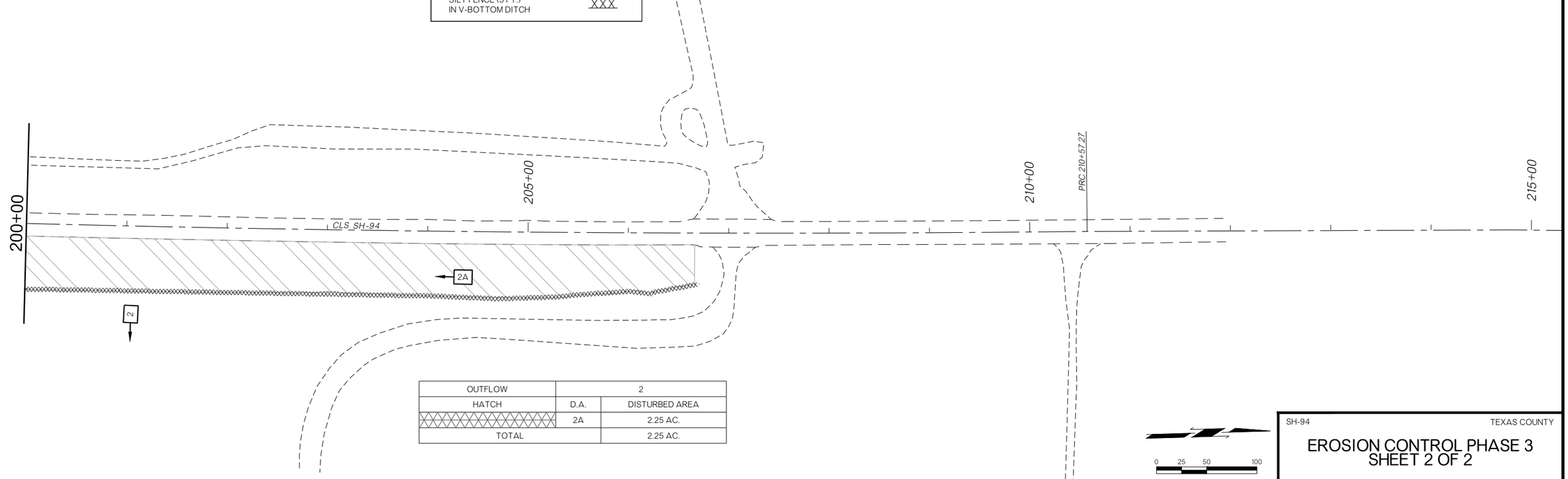


LEGEND

TEMPORARY SILT DIKE	^^^
TEMPORARY SILT FENCE	XXXXXXXX
SILT FENCE (5 FT.) IN V-BOTTOM DITCH	XXX

0 25 50 100



OUTFLOW	2	
HATCH	D.A.	DISTURBED AREA
	2A	2.25 AC.
TOTAL		2.25 AC.

0 25 50 100

SH-94 TEXAS COUNTY

EROSION CONTROL PHASE 3
SHEET 2 OF 2

JOB PIECE NO. 33323(04) SHEET NO. R005

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CEC // TRANSPORTATION

REVISIONS

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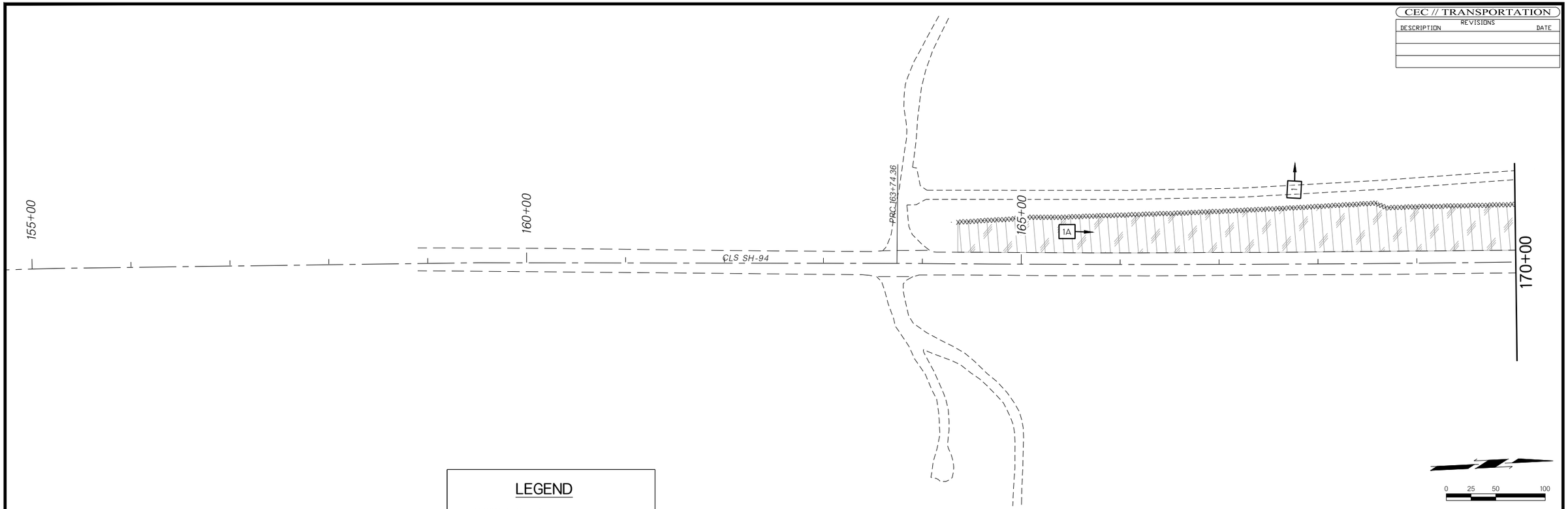
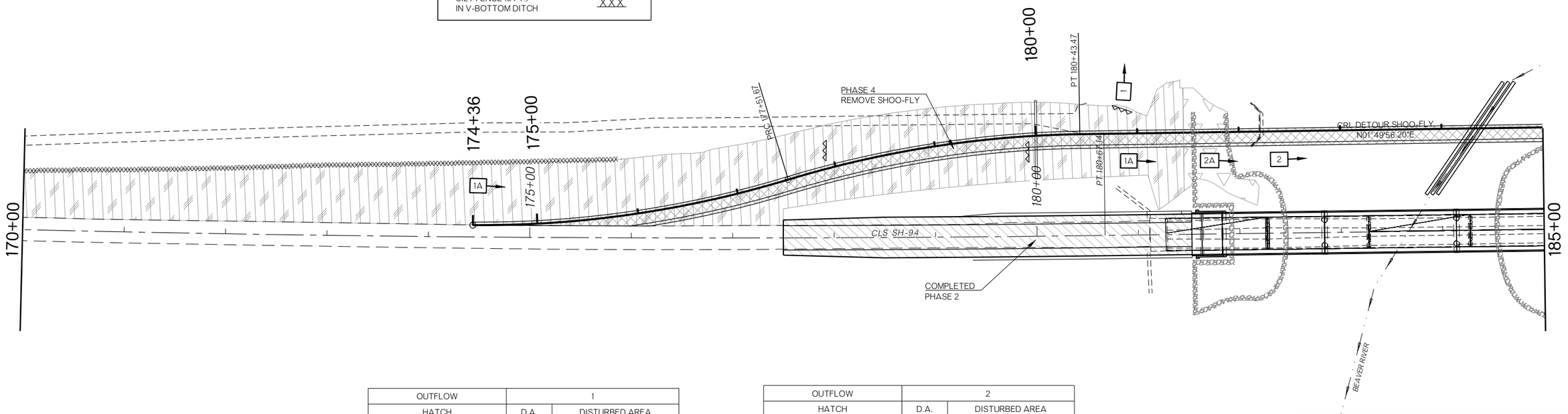


LEGEND

TEMPORARY SILT DIKE	^^^
TEMPORARY SILT FENCE	XXXXXXXX
SILT FENCE (5 FT.) IN V-BOTTOM DITCH	XXX



OUTFLOW	1	
HATCH	D.A.	DISTURBED AREA
	1A	2.28 AC.
TOTAL		2.28 AC.

OUTFLOW	2	
HATCH	D.A.	DISTURBED AREA
	2A	0.10 AC.
TOTAL		0.10 AC.

SH-94 TEXAS COUNTY

EROSION CONTROL PHASE 4
SHEET 1 OF 2

JOB PIECE NO. 33323(04) SHEET NO. R006

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REVISIONS

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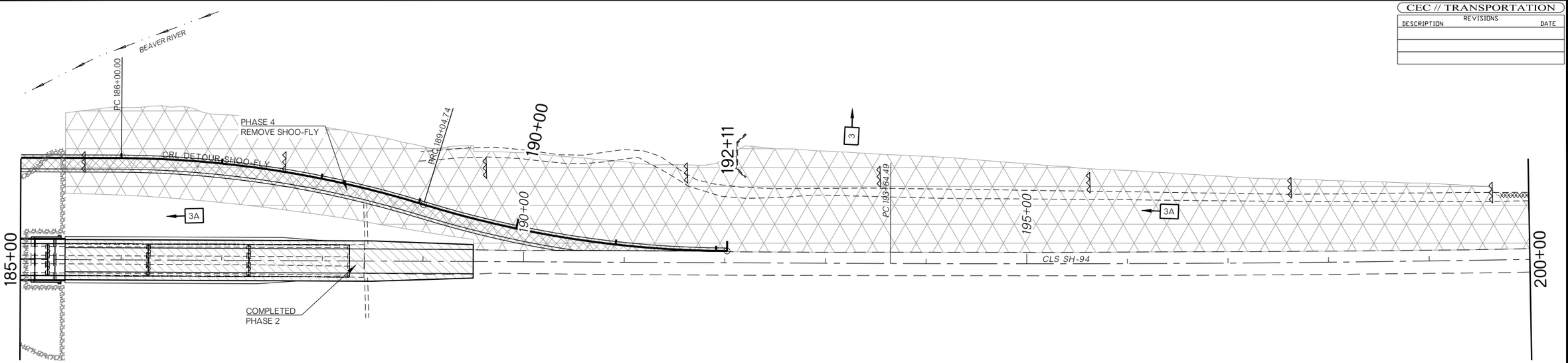


OUTFLOW	3	
HATCH	D.A.	DISTURBED AREA
	3A	3.51 AC.
TOTAL		3.51 AC.

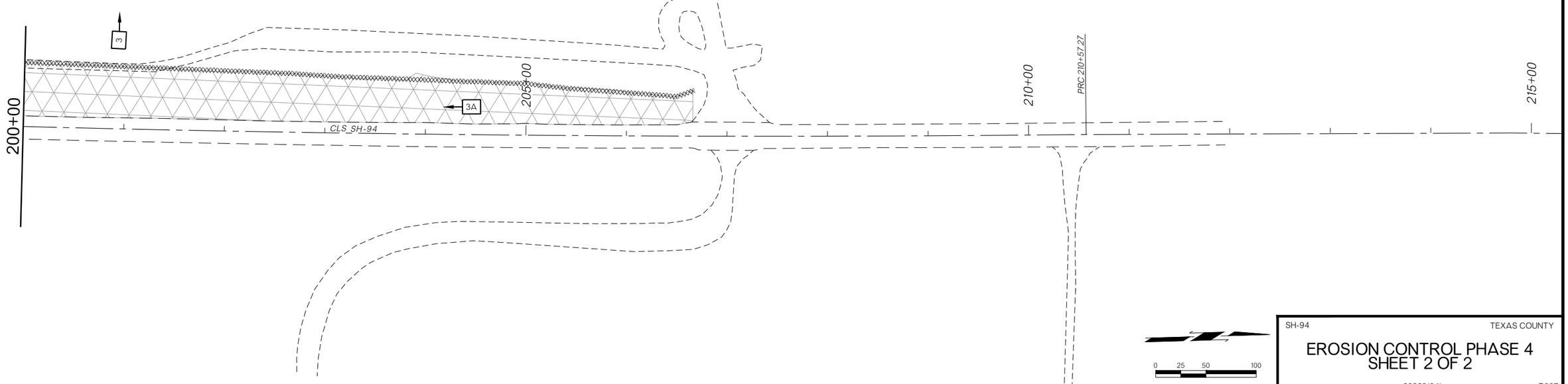
0 25 50 100

LEGEND

TEMPORARY SILT DIKE

TEMPORARY SILT FENCE XXXXXXXX

SILT FENCE (5 FT.) IN V-BOTTOM DITCH XXX



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SH-94 TEXAS COUNTY

EROSION CONTROL PHASE 4
SHEET 2 OF 2

JOB PIECE NO. 33323(04) SHEET NO. R007

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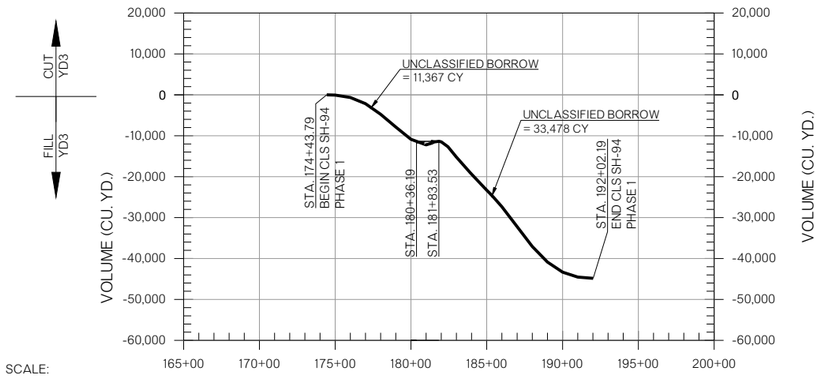
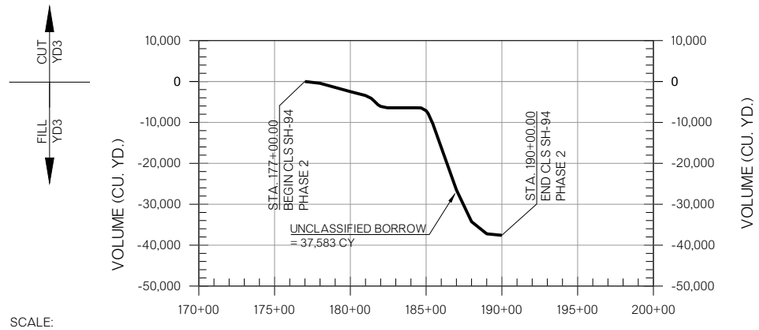


SCALE:
HORIZ. 1in = 1,000 FT.
VERT. 1in = 18,519 C.Y.

PHASE 1 - CLS SH-94



SCALE:
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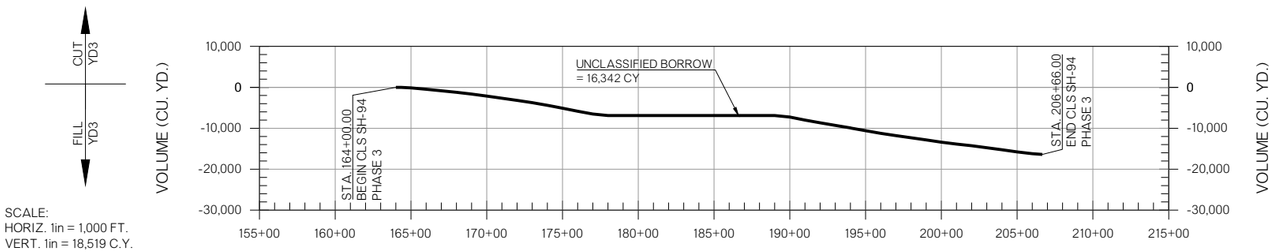
VERT. 1in = 18,519 C.Y.

PHASE 2 - CLS SH-94



SCALE:
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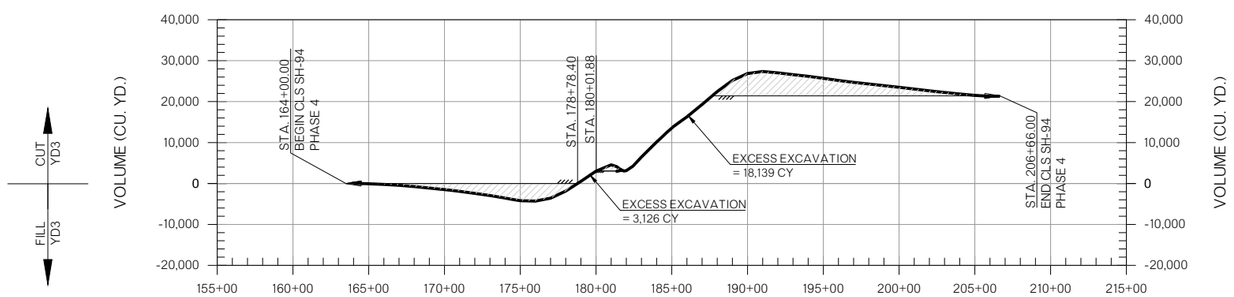
VERT. 1in = 18,519 C.Y.

PHASE 3 - CLS SH-94



SCALE:
HORIZ. 1in = 1,000 FT.
VERT. 1in = 18,519 C.Y.

PHASE 4 - CLS SH-94

MASS DIAGRAM PROVIDED FOR BIDDING PURPOSES ONLY. ACTUAL BALANCE POINTS TO BE DETERMINED BY CONTRACTOR AND VOLUME OF MATERIAL ENCOUNTERED DURING GRADING OPERATIONS. WHENEVER POSSIBLE, THE CONTRACTOR SHALL SEQUENCE EARTHWORK OPERATIONS IN ORDER TO OBTAIN THE MATERIAL FROM THE CUT SECTION FOR USE AS FILL RATHER THAN OBTAINING UNCLASSIFIED BORROW. MATERIAL DEPICTED AS WASTE SHALL ONLY BE CONSIDERED WASTE ONCE ALL EARTHWORK OPERATIONS HAVE BEEN COMPLETED. THIS MATERIAL SHALL BE USED TO REDUCE THE NEED FOR UNCLASSIFIED BORROW AT ANY LOCATION AND TIME THROUGH THE DURATION OF THE PROJECT.

SH-94 TEXAS COUNTY

MASS HAUL DIAGRAMS

JOB PIECE NO. 33323(04) SHEET NO. R008

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NOTE: ALL DISTANCES SHOWN TO RIGHT-OF-WAY, FENCES, UTILITIES, AND OTHER EXIST. OBJECTS ARE FROM ℄ OF SURVEY.

CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE

NE/4 SEC. 34,
T-03-N, R-17-E

+12.11 BENCHMARK 123.76' LT.

4-BW

2637.08'
S88°25'55.53"E

23' wide Metal Gate

+79.65 18"CGMP S.D. 44.94' LT.

PRES. R/W

4-BW

4-BW

3-BW

16' diameter concrete water trough

STA. 159+35.71 CLS SH-94
BEGIN INCIDENTAL CONSTRUCTION

126'

160+00

PROJ. 163+74.36

121'

165+00

TOC/TOS

2644.648'
N14°56'20"E

NS-101 ℄

170+00

2" OVERLAY

CLS SH-94
CURVE NO. 1

EXISTING GUARDRAIL
(REMOVE)

TOC/TOS

159'

175+00

100'

TOC/TOS

220'

1981.82'
S88°10'45.73"E

PRES. R/W

3-BW

24' wide Metal Gate

PRES. R/W

PRES. R/W

PRES. R/W

CURVE NO. 1
CLS SH-94
P.I. STA. 172+20.99
N: 629316.5226
E: 1028736.2249
R = 28646.627'
T = 846.635'
Δ = 3°23'08.54"
L = 1692.778'
C = 1692.531'
D = 0°12'00.03"
eMAX = 8 %
V = 65 MPH
S = N/C

0 25 50 100

+54.10 P.P. 215.58' RT.

2-wp

OHE

3-BW

OHE ℄

+79.56 P.P. 217.49' RT.

+75.49 18" CGMP S.D. 46.12' RT.

+89.79 P.P. 218.68' RT.

2-Wire power

3-BW

PRES. R/W

+05.33 SIGN 112.75' RT.

NW/4 SEC. 35,
T-03-N, R-17-E

STA. 164+35.71 CLS SH-94
BEGIN CONSTRUCTION

BM T-70-604 STA. 163+11.90 @ 123.80' LT.
ODOT BRASS MONUMENT SET IN CONCRETE POST ELEV= 2784.24'

BM #101 STA. 170+50.90 @ 142.90' LT.
TOP DELINEATOR POST ELEV= 2771.24'

EXIST. GRADE
@ CLS SH-94

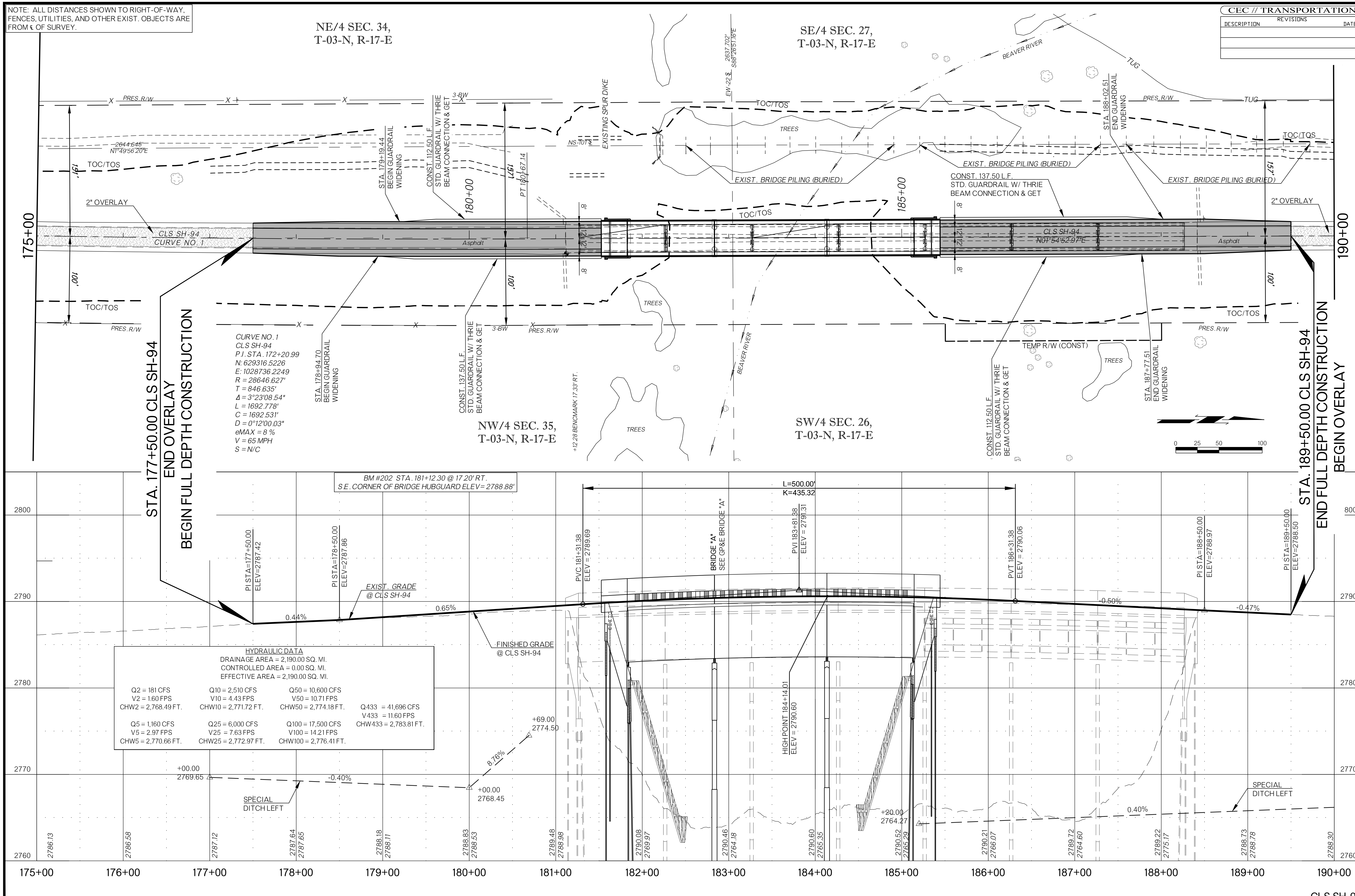
EXIST. GAS LINE
APPROX. DEPTH

UTILITY OWNERS CONTACT INFORMATION		
OWNER	ADDRESS	PHONE
TRI-COUNTY ELECTRIC COOP.	PO BOX 880, HOOKER, OK 73945	(580) 652-2418
PTC I	603 S. MAIN ST. GUYMON OK 73942	(800) 562-2556
TIMBERLAND & GATHERING PROCESSING CORP.	PO BOX 325, TYRONE, OK 73951	(806) 396-5681

	160+00	161+00	162+00	163+00	164+00	165+00	166+00	167+00	168+00	169+00	170+00	171+00	172+00	173+00	174+00	175+00
2800																
2790																
2780																
2770																
2760	2791.00	2789.69	2788.44	2787.16	2786.19	2785.25	2784.73	2784.18	2783.83	2783.92	2783.88	2784.13	2784.62	2785.05	2785.64	2786.13

CLS SH-94

COUNTY TEXAS HIGHWAY SH-94 JOB PIECE NO. 33323(04) SHEET NO. R009


NOTE: ALL DISTANCES SHOWN TO RIGHT-OF-WAY, FENCES, UTILITIES, AND OTHER EXIST. OBJECTS ARE FROM ℄ OF SURVEY.
CEC // TRANSPORTATION
REVISIONS
DESCRIPTION
DATE
NE/4 SEC. 34, T-03-N, R-17-E
SE/4 SEC. 27, T-03-N, R-17-E
NW/4 SEC. 35, T-03-N, R-17-E
SW/4 SEC. 26, T-03-N, R-17-E
BEAVER RIVER
PRES. R/W
TOC/TOS
TREES
EXISTING SPUR DIKE
EXIST. BRIDGE PILING (BURIED)
2" OVERLAY
CLS SH-94
CURVE NO. 1
Asphalt
N01°54'52.97"E
175+00
180+00
185+00
190+00
STA. 179+19.44 BEGIN GUARDRAIL WIDENING
CONST. 112.50 L.F. STD. GUARDRAIL W/ THRIE BEAM CONNECTION & GET
PT 180+67.14
STA. 188+02.51 END GUARDRAIL WIDENING
CONST. 137.50 L.F. STD. GUARDRAIL W/ THRIE BEAM CONNECTION & GET
STA. 178+94.70 BEGIN GUARDRAIL WIDENING
STA. 187+77.51 END GUARDRAIL WIDENING
TEMP R/W (CONST)
CURVE NO. 1
CLS SH-94
P.I. STA. 172+20.99
N: 629316.5226
E: 1028736.2249
R = 28646.627'
T = 846.635'
Δ = 3°23'08.54"
L = 1692.778'
C = 1692.531'
D = 0°12'00.03"
eMAX = 8 %
V = 65 MPH
S = N/C
STA. 177+50.00 CLS SH-94
END OVERLAY
BEGIN FULL DEPTH CONSTRUCTION
STA. 189+50.00 CLS SH-94
END FULL DEPTH CONSTRUCTION
BEGIN OVERLAY
BM #202 STA. 181+12.30 @ 17.20' RT.
S.E. CORNER OF BRIDGE HUBGUARD ELEV= 2788.88'
L=500.00'
K=435.32
PI STA=177+50.00 ELEV=2787.42
PI STA=178+50.00 ELEV=2787.86
PVC 181+31.38 ELEV = 2789.69
BRIDGE "A" SEE GP&E BRIDGE "A"
PVI 183+81.38 ELEV = 2791.31
PVT 186+31.38 ELEV = 2790.06
PI STA=188+50.00 ELEV=2788.97
PI STA=189+50.00 ELEV=2788.50
HIGH POINT 184+14.01 ELEV = 2790.60
EXIST. GRADE @ CLS SH-94
FINISHED GRADE @ CLS SH-94
0.44%
0.65%
-0.50%
-0.47%
SPECIAL DITCH LEFT
-0.40%
8.76%
0.40%
+00.00 2769.65
+00.00 2768.45
+69.00 2774.50
+20.00 2764.27
HYDRAULIC DATA
DRAINAGE AREA = 2,190.00 SQ. MI.
CONTROLLED AREA = 0.00 SQ. MI.
EFFECTIVE AREA = 2,190.00 SQ. MI.
Q2 = 181 CFS
V2 = 1.60 FPS
CHW2 = 2,768.49 FT.
Q10 = 2,510 CFS
V10 = 4.43 FPS
CHW10 = 2,771.72 FT.
Q50 = 10,600 CFS
V50 = 10.71 FPS
CHW50 = 2,774.18 FT.
Q433 = 41,696 CFS
V433 = 11.60 FPS
CHW433 = 2,783.81 FT.
Q5 = 1,160 CFS
V5 = 2.97 FPS
CHW5 = 2,770.66 FT.
Q25 = 6,000 CFS
V25 = 7.63 FPS
CHW25 = 2,772.97 FT.
Q100 = 17,500 CFS
V100 = 14.21 FPS
CHW100 = 2,776.41 FT.
2800
2790
2780
2770
2760
175+00
176+00
177+00
178+00
179+00
180+00
181+00
182+00
183+00
184+00
185+00
186+00
187+00
188+00
189+00
190+00
CLS SH-94
COUNTY TEXAS HIGHWAY SH-94 JOB PIECE NO. 33323(04) SHEET NO. R010

NOTE: ALL DISTANCES SHOWN TO RIGHT-OF-WAY, FENCES, UTILITIES, AND OTHER EXIST. OBJECTS ARE FROM ℄ OF SURVEY.

CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE

SE/4 SEC. 27,
T-03-N, R-17-E

+11.40 BENCHMARK 93.58' LT.

+48.73 BENCHMARK 132.79' LT.

TREES

TUG

TOC/TOS

PRES.R/W

157'

EXIST. BRIDGE PILING (BURIED)

NS-101 ℄

2639.711'
N1°59'50.35"E

PC 193+64.49

190+00

195+00

200+00

205+00

2" OVERLAY

CLS SH-94
N01°54'52.97"E

CLS SH-94
CURVE NO. 2

EXISTING GUARDRAIL
(REMOVE)

134'

100'

SW/4 SEC. 26,
T-03-N, R-17-E

CURVE NO. 2
CLS SH-94
P.I. STA. 202+11.13
N: 632305.4798
E: 1028836.1472
R = 28646.627'
T = 846.635'
Δ = 3°23'08.54"
L = 1692.778'
C = 1692.531'
D = 0°12'00.03"
eMAX = 8 %
V = 65 MPH
S = N/C

0 25 50 100

BM #103 STA. 192+11.40 @ 93.60' LT.
S.E. CORNER OF N.E. WINGWALL OLD BRIDGE ABUTMENT ELEV= 2776.41'

BM #104 STA. 201+48.70 @ 132.80' LT.
TOP OF DELINEATOR POST ELEV= 2772.49'

EXIST. GRADE
@ CLS SH-94

+00.00
2769.79

0.89%

+60.00
2770.33

0.40%

SPECIAL
DITCH LEFT

2788.30 2787.69 2787.21 2786.87 2786.39 2785.89 2785.46 2784.83 2784.33 2784.12 2784.04 2784.17 2784.31 2784.93 2785.83 2786.85

2800 2790 2780 2770 2760

190+00 191+00 192+00 193+00 194+00 195+00 196+00 197+00 198+00 199+00 200+00 201+00 202+00 203+00 204+00 205+00

CLS SH-94

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Save date: 11/21/2023 11:51:58 AM, LUKE CHALFANT, Plot date: 11/21/2023 12:01:40 PM, MARCO PARRA, AutoCAD PDF (General Documentation).pc3

COUNTY TEXAS HIGHWAY SH-94 JOB PIECE NO. 33323(04) SHEET NO. R011

NOTE: ALL DISTANCES SHOWN TO RIGHT-OF-WAY, FENCES, UTILITIES, AND OTHER EXIST. OBJECTS ARE FROM ℄ OF SURVEY.

CEC // TRANSPORTATION

REVISIONS	
DESCRIPTION	DATE

SE/4 SEC. 27,
T-03-N, R-17-E

NE/4 SEC. 27,
T-03-N, R-17-E

SW/4 SEC. 26,
T-03-N, R-17-E

NW/4 SEC. 26,
T-03-N, R-17-E

+93.09 25'X18' CGMPA S.D. 48.93' LT.
+95.08 48" CGMP S.D. 42.33' LT.

2640.13'
S88°24'17.09"E

Barb wire

TUG

PRES. R/W

50'

NS-101 ℄
2638.550'
N1°59'50.35"E

EW-21 ℄

170'

130'

100'

TOC/TOS

2" OVERLAY

CLS SH-94
CURVE NO. 2

12'

PRC 210+57.27

CURVE NO. 2
CLS SH-94
P.I. STA. 202+11.13
N: 632305.4798
E: 1028836.1472
R = 28646.627'
T = 846.635'
Δ = 3°23'08.54"
L = 1692.778'
C = 1692.531'
D = 0°12'00.03"
eMAX = 8 %
V = 65 MPH
S = N/C

205+00
210+00
215+00
220+00

+00.94 25'X18' CGMPA 47.85' RT.
+02.48 SIGN 118.18' RT.

0 25 50 100

BM T-70-605 STA. 207+16.90 @ 140.50' LT.
ODOT BRASS MONUMENT SET IN CONCRETE POST ELEV= 2791.98'

STA. 206+66.00 CLS SH-94
END CONSTRUCTION

STA. 211+66.00 CLS SH-94
END INCIDENTAL
CONSTRUCTION

EXIST. GRADE
@ CLS SH-94

EXIST. TUG LINE
APPROX. DEPTH

2820
2810
2800
2790
2780

2786.85
2788.27
2790.04
2791.93
2793.84
2795.81
2797.84

205+00 206+00 207+00 208+00 209+00 210+00 211+00 212+00 213+00 214+00 215+00 216+00 217+00 218+00 219+00 220+00

CLS SH-94

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COUNTY TEXAS HIGHWAY SH-94 JOB PIECE NO. 33323(04) SHEET NO. R012

NOTE: ALL DISTANCES SHOWN TO RIGHT-OF-WAY, FENCES, UTILITIES, AND OTHER EXIST. OBJECTS ARE FROM ℄ OF SURVEY.

CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE

CURVE NO. 1
CRL DETOUR SHOO-FLY
P.I. STA. 175+95.23
N: 629699.2300
E: 1028733.9304
R = 1041.740'
T = 158.865'
Δ = 17°20'29.59"
L = 315.301'
C = 314.098'
D = 5°30'00.03"
eMAX = N/A
V = 45 MPH
S = N/C

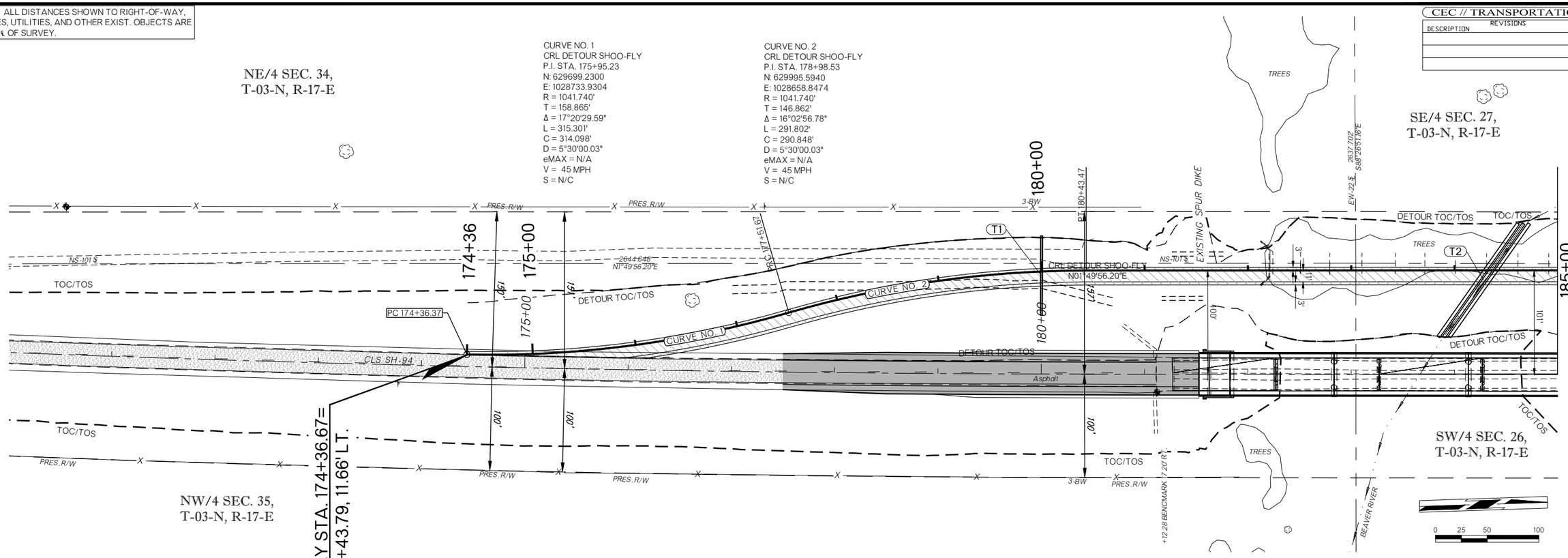
CURVE NO. 2
CRL DETOUR SHOO-FLY
P.I. STA. 178+98.53
N: 629995.5940
E: 1028658.8474
R = 1041.740'
T = 146.862'
Δ = 16°02'56.78"
L = 291.802'
C = 290.848'
D = 5°30'00.03"
eMAX = N/A
V = 45 MPH
S = N/C

NE/4 SEC. 34, T-03-N, R-17-E

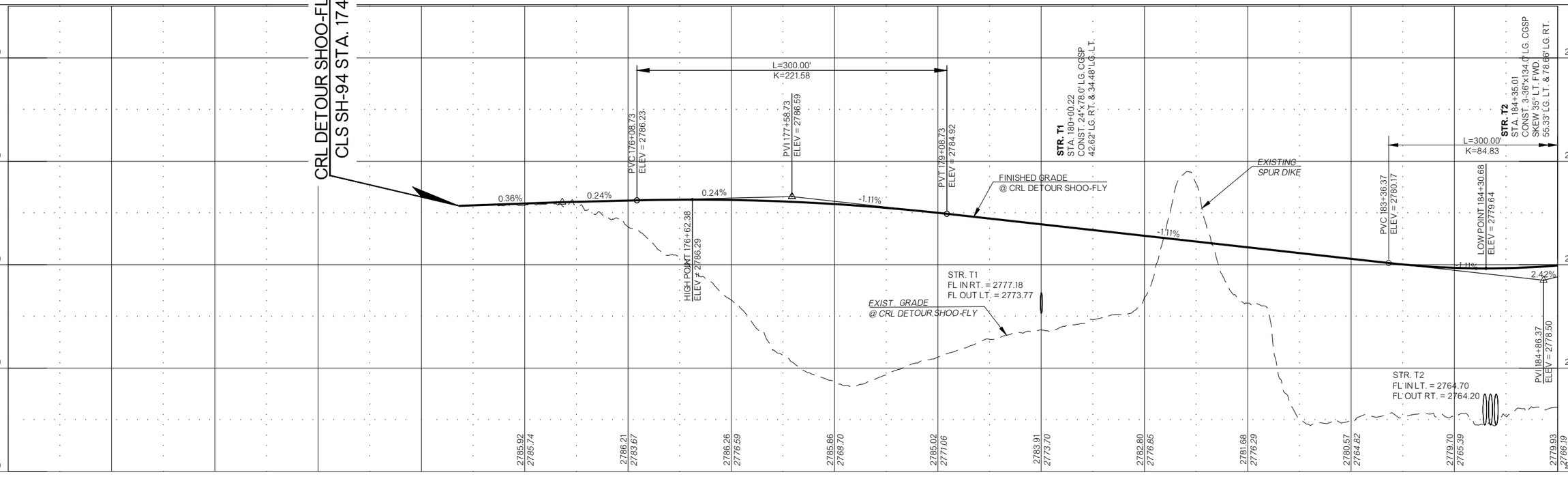
SE/4 SEC. 27, T-03-N, R-17-E

SW/4 SEC. 26, T-03-N, R-17-E

NW/4 SEC. 35, T-03-N, R-17-E



CRL DETOUR SHOO-FLY STA. 174+36.67= CLS SH-94 STA. 174+43.79, 11.66' LT.



CRL DETOUR SHOO-FLY

NOTE: ALL DISTANCES SHOWN TO RIGHT-OF-WAY, FENCES, UTILITIES, AND OTHER EXIST. OBJECTS ARE FROM ℄ OF SURVEY.

CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE

SE/4 SEC. 27,
T-03-N, R-17-E

+11.40 BENCHMARK 93.58' LT.

CURVE NO. 3
CRL DETOUR SHOO-FLY
P.I. STA. 187+53.47
N: 630852.0017
E: 1028686.6859
R = 1041.740'
T = 153.467'
Δ = 16°45'38.99"
L = 304.742'
C = 303.657'
D = 5°30'00.03"
eMAX = N/A
V = 45 MPH
S = N/C

CURVE NO. 4
CRL DETOUR SHOO-FLY
P.I. STA. 190+58.97
N: 631143.3580
E: 1028785.6333
R = 1041.740'
T = 154.233'
Δ = 16°50'35.76"
L = 306.241'
C = 305.139'
D = 5°30'00.03"
eMAX = N/A
V = 45 MPH
S = N/C

TREES
TUG
BEAVER RIVER
PRES. R/W
TOC/TOS
DETOUR TOC/TOS
PRC 189+04.74
PT 192+10.98
CURVE NO. 3
CURVE NO. 4
2639.71'
N1°59'50.35"E
NS-101 ℄
CLS SH-94
N0°54'62.97"E
Asphalt
TEMP R/W
3'
101'
157'
100'
185+00
186+00
190+00
192+11
195+00

SW/4 SEC. 26,
T-03-N, R-17-E

CRL DETOUR SHOO-FLY STA 192+10.98
CLS SH-94 STA. 192+02.20 , 11.66 LT.

0 25 50 100

L=300.00'
K=84.83
L=300.00'
K=106.60
PVT 186+36.37
ELEV = 2782.14
PVC 187+41.14
ELEV = 2784.68
PVI 188+91.14
ELEV = 2788.31
PVT 190+41.14
ELEV = 2787.73
PI STA=191+36.37
ELEV=2787.36
PI STA=192+10.98
ELEV=2787.15
2.42%
-0.39%
-0.39%
-0.28%
FINISHED GRADE
@ CRL DETOUR SHOO-FLY
HIGH POINT 189+99.63
ELEV = 2787.81
EXIST. GRADE
@ CRL DETOUR SHOO-FLY

2800
2790
2780
2770
2760

2779.93 2766.19
2781.33 2767.16
2783.68 2766.48
2785.94 2768.41
2787.35 2772.25
2787.81 2780.93
2787.50 2786.25
2787.18 2787.13

185+00 186+00 187+00 188+00 189+00 190+00 191+00 192+00 193+00 194+00 195+00 196+00 197+00 198+00 199+00 200+00

CRL DETOUR SHOO-FLY

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COUNTY TEXAS HIGHWAY SH-94 JOB PIECE NO. 33323(04) SHEET NO. R014

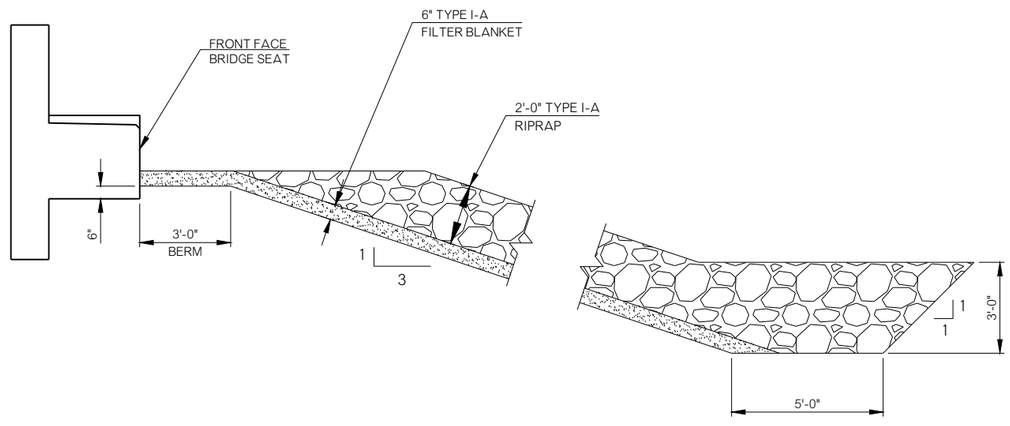
NOTE: ALL DISTANCES SHOWN TO RIGHT-OF-WAY, FENCES, UTILITIES, AND OTHER EXIST. OBJECTS ARE FROM ℄ OF SURVEY.

CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE

PLAN VIEW



RIPRAP AND FILTER BLANKET DETAIL

QUANTITIES INCLUDED IN BRIDGE PAY ITEMS

SH-94 TEXAS COUNTY

SPUR DIKE DETAIL

JOB PIECE NO. 33323(04) SHEET NO. R015

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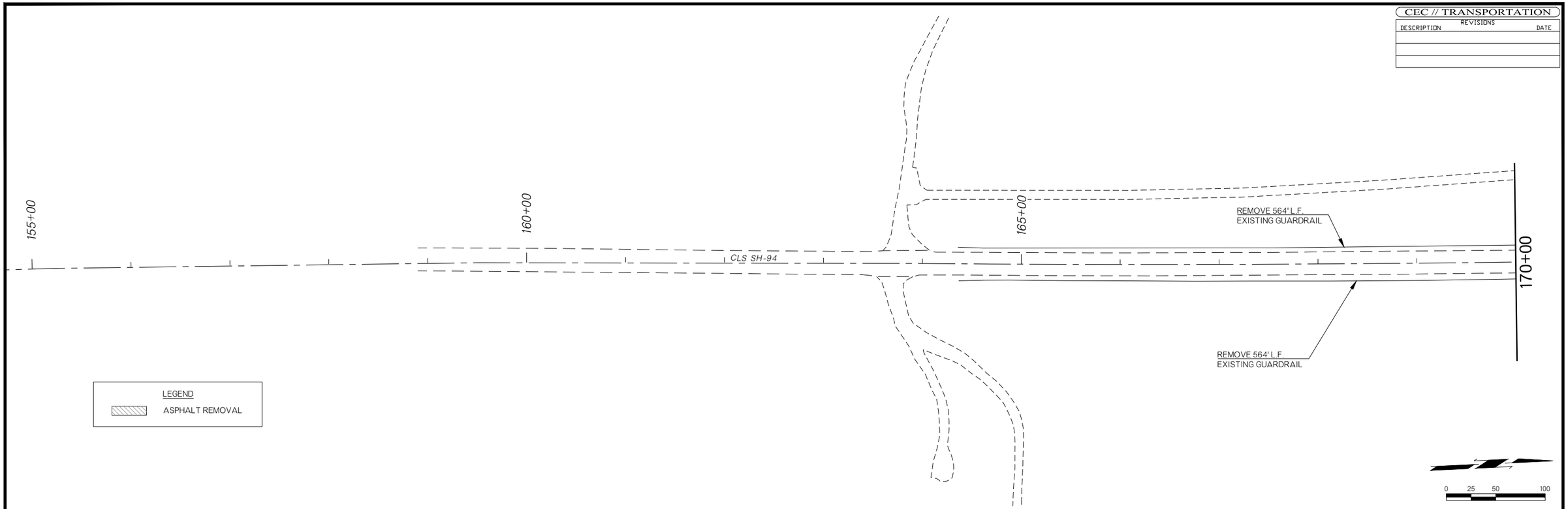
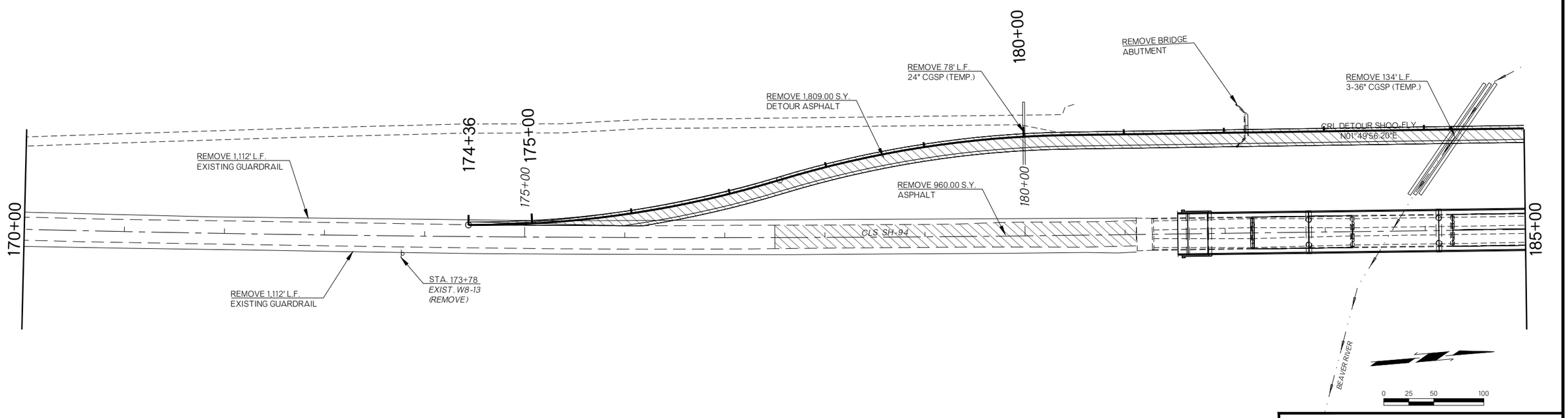
CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE





SH-94

TEXAS COUNTY

REMOVALS
SHEET 1 OF 2

JOB PIECE NO. 33323(04) SHEET NO. R016

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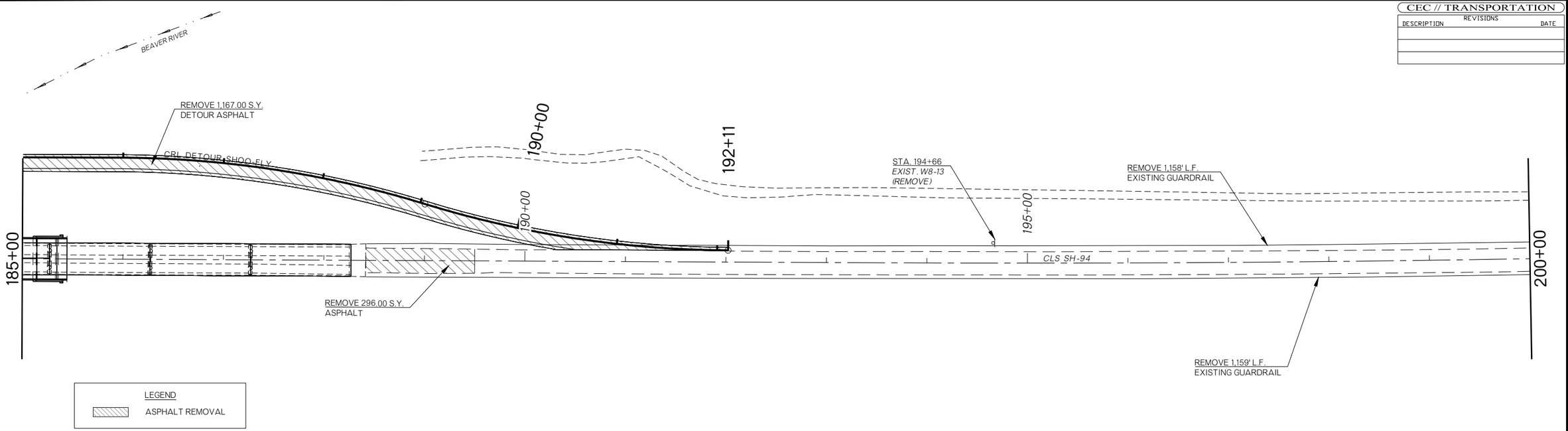
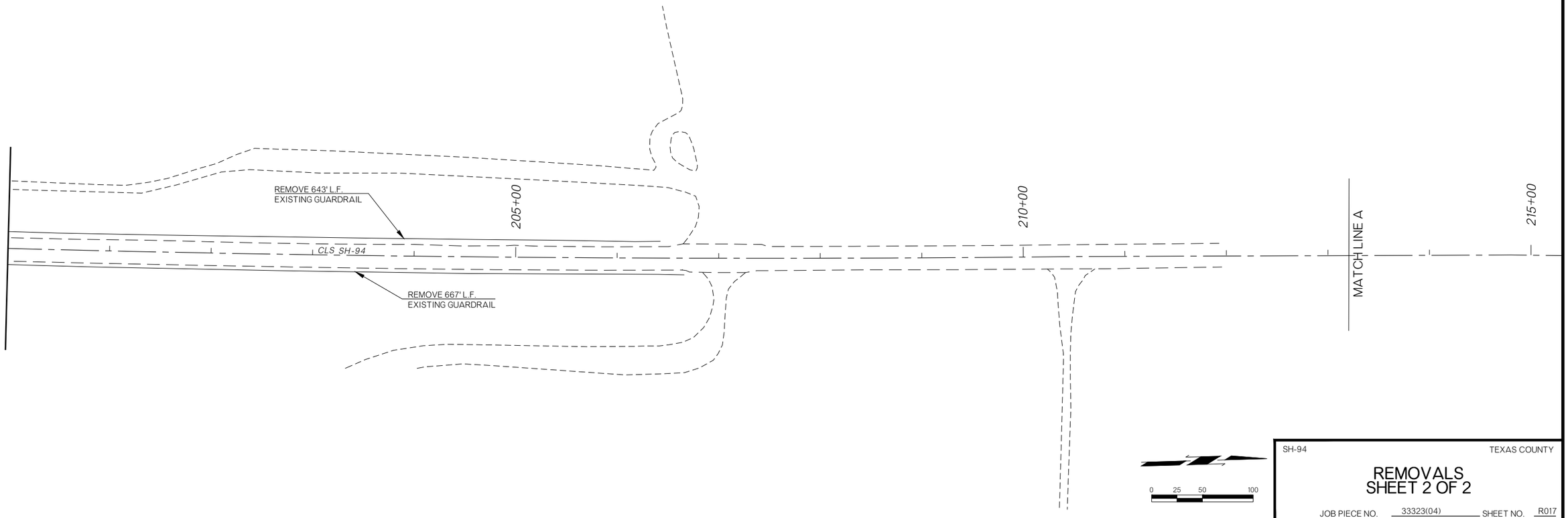
CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE





SH-94 TEXAS COUNTY

REMOVALS
SHEET 2 OF 2

JOB PIECE NO. 33323(04) SHEET NO. R017

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SURVEY DATA SHEETS

TEXAS COUNTY
US 94
SWO 5356(1)
STATE JOB NO. 33323(04)

INDEX OF SURVEY SHEETS

SURVEY CONTROL DATA

1. POSITIONAL CONTROL:

   A. POSITIONAL CONTROL FOR THIS SURVEY IS THE NGS OKLAHOMA STATE PLANE COORDINATE SYSTEM, NAD83 (2011), LAMBERT PROJECTION (NORTH ZONE).

   B. ACCURACY - THE POSITIONAL CONTROLS FOR THIS SURVEY MEETS OR EXCEEDS THE FOLLOWING ACCURACY CRITERIA:
      1. NETWORK ACCURACY: 0.10 FOOT
      2. LOCAL ACCURACY: 0.05 FOOT

2. BEARINGS:

   THE BEARINGS SHOWN HEREIN OR HEREON ARE GRID BEARINGS DERIVED FROM THE NGS OKLAHOMA STATE PLANE COORDINATE SYSTEM AND ARE NOT ASTRONOMICAL. THE ANGLE OF VARIANCE BETWEEN GRID NORTH (GN) AND THE ASTRONOMICAL TRUE NORTH (TN) IS DEPICTED DIAGRAMMATICALLY.

3. VERTICAL CONTROLS:

   A. LEVEL DATUM IS NAVD 88 FROM STATIC GPS.

   B. ACCURACY - VERTICAL CONTROL FOR THIS SURVEY MEETS OR EXCEEDS THE FOLLOWING ACCURACY CRITERIA:
      1. NETWORK ACCURACY (FROM GPS OR LEVELING): 0.10 FOOT
      2. LOCAL ACCURACY (CONFIRMED BY LEVELING): 0.02 FOOT

SURVEY BEGAN: March 4, 2019
SURVEY COMPLETED: June 6, 2019

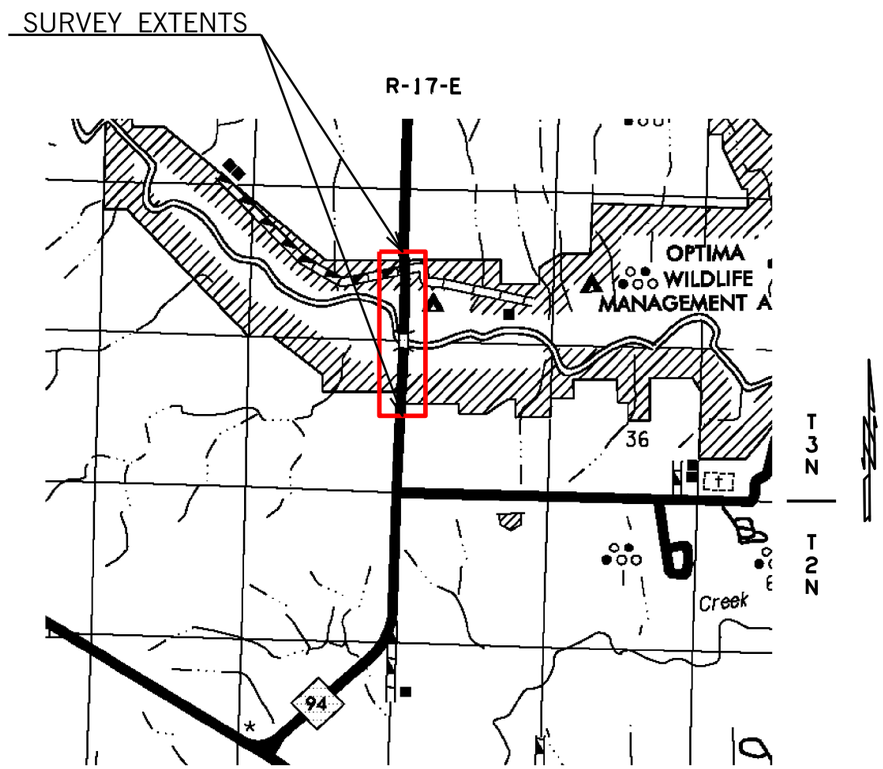
SURVEY CREW MEMBERS:

Steve Perring, Professional Land Surveyor II
Kevin Fleck, Transportation Specialist Level VI
Justin Hughes, Transportation Specialist Level III
Layne Gwartney, Transportation Specialist Level I

EQUIPMENT:

LEICA GPS EQUIPMENT
GPS 500: EE-125, EE131, EE-139, EE-204
GPS1200: EE204
GPS CS15 EE271, EE271
LEICA DIGITAL LEVEL EL583
LEICA TOTAL STATION ET521

PROJECT LOCATION



PROJECT LENGTH 4549.89 Ft. 0.86 MI.

BEGINNING SATTION : 162+77.01
ENDING STATION : 208+26.90

"CALL BEFORE YOU DIG"
THE NEW NATIONAL LOCATE NUMBER
**811

UTILITY LIST

Timberland Gathering & Processing Co.	806-396-5681
Tri-County Electric Coop	580-652-2418
PTCI	800-562-2556

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

SWO 5356(1) Job/Piece 33323 (04) Engr. Contract No. _____

LAND SURVEYOR'S CERTIFICATION

I hereby certify that all land and property sub-division distances, angles, corners and monumentation made or used in conjunction with this survey and depicted or recorded herein or hereon were recovered, established or re-established in substantial conformity with:

-applicable instructions contained in the U.S. Government Bureau of Land Management publication "Manual of Surveying Instructions";
-its supplement, "Restoration of Lost or Obliterated Corners and Subdivision of Sections";
-"Oklahoma Minimum Standards for the Practice of Land Surveying" as adopted by the State Board of Registration for Professional Engineers and Land Surveyors; and
-sound land surveying practices;

including a thorough search, study, analysis and consideration of all existing records and field evidence.

I further certify that all survey monuments depicted exist and that all land survey work was done by me or under my direct supervision and that it is true, accurate and correct to the best of my knowledge and belief.

Dated this 6th day of June 20 19

Land Surveyor Steve Perring (seal)
Signature
Steve Perring
Printed Name

REGISTERED PROFESSIONAL LAND SURVEYOR — STEVE PERRING 1617 — OKLAHOMA

Oklahoma Registered Land Surveyor No. 1617

Certificate of Authorization No. _____ Exp. Date _____

THIS SURVEY MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKLAHOMA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS, SEPTEMBER 14, 2018.

SPECIFICATIONS FOR SURVEYS FOR PRIMARY AND SECONDARY HIGHWAYS DATED JANUARY 2018 GOVERN.

PLS	SJP		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	SJP	LGG	
CHECKED	KDF	JGH	SURVEY DATA SHEET
APPROVED			SWO 5356(1)
CREW	CLINTON		
COUNTY TEXAS	HIGHWAY SH-94	STATE JOB NO. 33323(04)	SHEET NO. S001

OKLAHOMA DEPARTMENT OF TRANSPORTATION

SURVEY DIVISION (405) 521-2621 FAX 405-522-0164

June 6, 2019

TO: Kyle King, Chief of Surveys

FROM: Steve Perring, Professional Land Surveyor

SUBJECT: SWO 5356(1) - J/P 33323(04) – SH-94 – Texas County
SH-94 OVER THE BEAVER RIVER, 3.1 MILES NORTH OF JCT SH-94/SH-3.

HISTORICAL LETTER AND WRITTEN REPORT

I. GENERAL

Length of Survey: 4549.99 feet or 0.9 miles
The measurement unit for this projeot is the **U.S. Survey Foot.**

II. SURVEY ASSIGNMENT

This survey was assigned to and completed by my crew based at Clinton.

III. PURPOSE OF SURVEY

The purpose of this survey was to obtain sufficient information for the design and construction plans to replace the exising Bridge on SH-94 over the Beaver River.

IV. SURVEY LIMITS

Survey shall begin 1850 feet south of the south end of the existing bridge, and extend north to a point 2000 feet north of the north end of the bridge.

Survey width shall be 200 feet left and 200 feet right of the existing highway centerline. For an area 500 feet south of the existing bridge, through an area 500 feet north of the bridge the limits are to be extended out to 500 feet left and 500 feet right of the existing centerline.

V. ALIGNMENT

The centerline of survey is along present SH 94 as shown on SAP No. 70(11) Plans. The following is a description of points and procedures used to establish Centerline of Survey. The stationing shown below is from SAP No. 70(11) Plans.

Ties to Base Line and centerline of survey were used between Section Corner at Sta. 133+12.76 to Section Corner at Sta.235+85.40 as shown on SWO 2729(1) Survey and SAP No. 70(11) Plans.

9003 - Sta. 130+12.76 (Sec. Cor. on Centerline)
Found ODOT Brass Mon. No. T-70-35

1001 - PC Sta. 146+81.58
Not set and computed on Base Line from references found 54.53' Lt. (#4 rebar) & 44.71' Rt. (#4 rebar)

5000 - PI Sta. 155+28.24
Set PK nail on Base Line from reference found 57.7' Lt. (#4 rebar)

1003 - PRC Sta. 163+74.40
Set PK nail 50' Rt. of Base Line fitting ties to reference found 90.64' 28^12'50" Lt. of North of Base Line tangent.

5001 - PI Sta. 172+21.06
Set #4 rebar 100' Rt. of Base Line using ties from SAP No. 70(11) Plans.

1006 - PT Sta. 180+07.22
Set PK nail 100' Rt. of Base Line using ties from SAP No. 70(11) Plans.

1000 – PC Sta. 193+65.10
Set PK nail 100' Rt. of Base Line using ties from SAP No. 70(11) Plans.

5002 – PI Sta. 202+11.76
Set #4 rebar 100' Rt. of Base Line using ties from SAP No. 70(11) Plans.

1004 – PRC Sta. 210+57.92
Not Set and computed 50' Rt. of Base Line using ties from SAP No. 70(11) Plans.

5003 – PI Sta. 219+04.58
Set PK nail on Base Line using ties from SAP No. 70(11) Plans.

1010 – PT Sta. 227+50.74
Not set and computed on Base Line from references found 50.22' Lt. (#4 rebar) & 49.20' Rt. (#4 rebar)

9019 - Sta. 235+84.40 (Sec. Cor. on Centerline)
Found ODOT Brass Mon. No. T-70-38

VI. STATIONING

SAP No. 70(11) Plans PC Sta. 146+81.58 was used decreasing south and increasing north.

VII. HORIZONTAL CONTROL

A. Horizontal Control for this survey is the National Geodetic Surveys Oklahoma State Plane Coordinate System, NAD83(CORS2011), North Zone.
B. Primary Control points T-70-604 and T-70-605 were established following ODOT Survey Division Standard. Secondary Control for this survey was established by double point observations with RTK, utilizing my Primary Control Points for base station set ups.

VIII. VERTICAL CONTROL

A. Vertical control for this survey was taken from Primary Control points T-70-604 and T-70-605. Bench marks were set to meet ODOT standards for the minimum distance between control points.
B. Level datum for this survey is NGS NAVD 88.
C. All Control Leveling for this project was done using the Digital Level.
D. Benchmarks established or used on this survey are within the accuracy requirements of NGS Third Order standards as a minimum.
E. A **"BENCHMARKS & CHECK LEVELS"** list was placed in the .DGN file and a hardcopy submitted with the completed survey

IX. PHOTO CONTROLS

Photo control was established by consultant and was provided by Aerial Survey Branch.

X. TOPOGRAPHY AND DTM

Topography and DTM data was located and collected by the conventional field method where features could not be determined with sufficient accuracy by the aerial mapping method.

XI. LAND TIES

A. Complete land tie information was obtained by the conventional field method as needed to purchase new right-of-way, including the bounding out of all sections through which the survey centerline passes.
B. The existing land corners established under existing projects and plans were checked and used, if at all possible.
C. All corporate boundary lines, subdivisions and all other property divisions adjacent to and/or crossing the Survey Centerline throughout the project limits were computed mathematically, based upon the best available information. Property divisions include existing right-of-way lines.
D. The Original Government Survey notes were used from the following surveys:
- 1891 Original Survey T-3-N, R-17-E CM and 1891 Independent Resurvey North Boundary of T-2-N, R-17-E CM
E. The ODOT field Books were used from the following surveys:
- SWO2729(1) Survey
F. The ODOT Highway plans used:
- SAP No. 70(11) Plans
G. The U.S. Army Corps of Engineers Boundary Survey was obtained from the Fort Supply Project Office and used on this survey.

SCALE 0 100 200 300 400 500 Feet

PLS	SJP	
DRAWN	SJP	
CHECKED	KDF	
APPROVED		
CREW	CLINTON	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5356(1)

COUNTY TEXAS HIGHWAY SH 94 STATE JOB NO. 33323(04) SHEET NO. S002

XII. EXISTING RIGHT-OF-WAY

Existing right-of-way, easements and property ownerships for this survey were obtained from deeds on file at the Texas County Court House and the ODOT Right of Way Division, Engineering Branch.

Note:
Right-of-Way taken from Book 509, Pages 221-22 in the Texas County Court House. Present Right-of-Way is 50' Left of Section Line as shown on NRWR-2(1) 1933 Plans and Deeds.

SAP-70(11) Plans and SAP-70(13) R/W Plans depict the present westerly Right-of-Way from Sta.165+85 to Sta.205+65 as shown on the Right-of-Way from Book 509, Pages 221-22 found at the Texas County Court House.

XIII. UTILITIES

A. All utility companies servicing the project area were contacted thru **"CALL OKIE"** and their locations were obtained by either conventional field methods, RTK, or from utility plats, maps, or other information provided by the owning companies.
B. The information was placed in the submitted Microstation Design File, and a hardcopy of ODOT Form S0-7, "List of Public/Privately Owned Utilities", submitted with the completed survey.

XIV. ENVIRONMENTAL CONCERNS

During the performance of required conventional survey work, survey crew members watched for areas/sites that could have previously or are now being used to store or dispose of possible contaminants. None were found.

XV. DRAINAGE INFORMATION

Drainage areas for all drains crossing the Survey Centerline were taken from USGS quad maps that have been scanned into a Microstation Design File. These areas (divide lines) were field checked for accuracy prior to submittal of the project.

A. High water information was obtained by the conventional field method and placed in the submitted Microstation Design File.
B. Ravine sections for drains crossing the Survey Centerline are to be obtained by Bridge Division and Design Division from the Digital Terrain Model (DTM).
C. Flowline profiles were obtained on all cross drains.

XVI. SUBMISSION OF SURVEY DATA

Upon completion of this survey, a .PDF of the following was submitted, in addition to the archived survey data:
A. Survey Data Sheets
B. Historical Letter & Written Report
C. Form SD-1, Transmittal Letter w/FSVARCH.INDEX attached.
D. Form SD-7, Public and Privately Owned Utilities List w/ vicinity map on back.
E. Form SD-9, Final Cost Report of Survey
F. Form SD-11, Position and Description of Survey Monuments (GPS control monuments, Brass/Aluminum Caps for benchmarks, etc.)
G. Form SD-20, Survey Control Data Statement.
H. Form SD-41, Surveyor's Certification.
I. Cogo Data (coordinate list with alignments).
J. Benchmarks & Check Levels list, including the SWO and description of the project.

K. Certified Land Corner form in .pdf format.
L. Ownerships List
M. Network/OPUS adjustment report
N. GPS on Benchmaks submittal to and acceptance from NGS
O. CSSDA Field Form

XVII. PERSONNEL

Kevin Fleck	Trans. Spec. VI
Justin Hughes	Trans. Spec. III
Layne Gwartney	Trans. Spec. I

Steve Perring
Professional Land Surveyor

SWOS356_1_V1_COGO.txt

*PT NO.	EASTING	NORTHING	ELEVATION
101	1028569.98000	629157.64000	2771.24000
102	1028783.21000	630207.23000	2788.88000
103	1028709.22000	631309.44000	2776.41000
104	1028690.58000	632244.19000	2772.49000
1000	1028807.85957	631459.31724	
1001	1028551.51658	626784.32997	
1002	1057182.14965	625827.19379	
1003	1028658.01455	628473.50756	
1004	1028814.41338	633151.83601	
1005	1000133.87946	631119.82133	
1006	1028764.51252	630162.68515	
1007	1000177.22651	632416.45342	
1008	1028772.44659	630400.01525	
1009	1057451.60025	633887.21860	
1010	1028820.96718	634844.35478	
1011	1028817.07369	633039.68101	
1012	1028649.18662	628376.56247	
1013	1028819.40109	632921.52247	
5000	1028579.80421	627630.49251	
5001	1028736.22489	629316.52261	
5002	1028836.14721	632305.47978	
5003	1028792.67955	633998.19224	
7600	1028523.78910	628388.19617	
7601	1028560.15472	628693.20911	
7602	1028693.47974	632657.82091	
7603	1028613.85270	630371.78519	
7604	1028616.05712	630437.74968	
7605	1028114.03623	630385.33125	
7606	1028526.96808	628422.46185	
7607	1028116.24065	630451.29575	
7608	1028662.07216	632918.74817	
7609	1028764.49485	628539.81220	
7610	1028868.31371	628356.98386	
7611	1028885.15210	628541.74124	
7612	1028877.07384	628453.18443	
7613	1028864.45669	630159.34396	
7614	1028871.29427	630363.87514	
7615	1028873.49945	630429.83840	
7616	1028907.80374	631455.97606	
7617	1028919.38554	632923.28557	
7618	1029371.04481	630348.08277	
7619	1029373.24999	630414.04603	
7620	1028872.39686	630396.85677	
7621	1028614.90785	630404.76871	
7622	1028614.90694	630404.76874	
8000	1025965.40402	628494.03114	
8001	1028601.45247	628420.38078	
8002	1028590.89151	628090.24966	
8004	1030571.70900	628027.28600	
8005	1030561.24959	627697.32865	
9001	1023227.73300	625268.37400	
9002	1025860.62300	625186.48100	
9003	1028495.77100	625116.82300	
9004	1031131.24986	625033.48274	
9005	1033768.38800	624950.09000	
9006	1033858.95714	627592.80003	
9007	1028580.33055	627760.11854	
9008	1023309.57731	627907.35501	
9009	1023391.42162	630546.33603	
9010	1026028.15586	630474.87506	
9011	1028664.89010	630403.41409	
9012	1031307.22371	630319.91501	

SCALE 0 100 200 300 400 500 Feet

PLS	SJP	
DRAWN	SJP	
CHECKED	KDF	
APPROVED		
CREW	CLINTON	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5356(1)

COUNTY TEXAS HIGHWAY SH 94 STATE JOB NO. 33323(04) SHEET NO. S003

```
 9013  1033949.55732    630236.41594
 9014  1034040.45203    632879.97376
 9015  1028756.89128    633041.52111
 9016  1023477.65331    633188.54601
 9017  1023563.88500    635830.75600
 9018  1026207.26700    635750.88700
 9019  1028848.85200    635678.46800
 9020  1031490.24950    635605.36600
 9021  1034131.64700    635532.26400
 9022  1025944.48674    627833.74983
 9023  1031219.22925    627676.47243
 9024  1026117.78402    633115.01931
 9025  1031398.67105    632960.74746
T-70-604  1028529.03000     628422.47000 2784.24000
T-70-605  1028680.65000     632809.63000 2791.98000

            Project Name: swo5356_1_v1
             Description:
Horizontal Alignment Name: A001
             Description:
                  Style: Centerline
                                    STATION       EASTING      NORTHING

Element: Linear
                POB (    9003)          130+13.14 1028495.77100  625116.82300
                 PC (    1001)          146+81.58 1028551.51658  626784.32997
          Tangent Direction:   N  1A54'52.97" E
             Tangent Length:             1668.44

Element: Circular
                 PC (    1001)          146+81.58 1028551.51658  626784.32997
                 PI (    5000)          155+28.22 1028579.80421  627630.49251
                 CC (    1002)                    1057182.14965  625827.19379
                PRC (    1003)          163+74.36 1028658.01455  628473.50756
                     Radius:             28646.63
                      Delta:        3A23'08.54" Right
  Degree of Curvature(Arc):         0A12'00.03"
                     Length:             1692.78
                    Tangent:              846.64
                      Chord:             1692.53
             Middle Ordinate:               12.50
                    External:               12.51
           Tangent Direction:   N  1A54'52.97" E
            Radial Direction:   S 88A05'07.03" E
              Chord Direction:  N  3A36'27.24" E
            Radial Direction:   S 84A41'58.50" E
           Tangent Direction:   N  5A18'01.50" E

Element: Circular
                PRC (    1003)          163+74.36 1028658.01455  628473.50756
                 PI (    5001)          172+20.99 1028736.22489  629316.52261
                 CC (    1005)                    1000133.87946  631119.82133
                 PT (    1006)          180+67.14 1028764.51252  630162.68515
                     Radius:             28646.63
                      Delta:        3A23'08.54" Left
  Degree of Curvature(Arc):         0A12'00.03"
                     Length:             1692.78
                    Tangent:              846.64
                      Chord:             1692.53
             Middle Ordinate:               12.50
                    External:               12.51
           Tangent Direction:   N  5A18'01.50" E
            Radial Direction:   S 84A41'58.50" E
```



```
              Chord Direction:  N  3A36'27.24" E
            Radial Direction:   S 88A05'07.03" E
           Tangent Direction:   N  1A54'52.97" E

Element: Linear
                 PT (    1006)          180+67.14 1028764.51252  630162.68515
                 PC (    1000)          193+64.49 1028807.85957  631459.31724
          Tangent Direction:   N  1A54'52.97" E
             Tangent Length:             1297.36

Element: Circular
                 PC (    1000)          193+64.49 1028807.85957  631459.31724
                 PI (    5002)          202+11.13 1028836.14720  632305.47978
                 CC (    1007)                    1000177.22651  632416.45342
                PRC (    1004)          210+57.27 1028814.41338  633151.83601
                     Radius:             28646.63
                      Delta:        3A23'08.54" Left
  Degree of Curvature(Arc):         0A12'00.03"
                     Length:             1692.78
                    Tangent:              846.64
                      Chord:             1692.53
             Middle Ordinate:               12.50
                    External:               12.51
           Tangent Direction:   N  1A54'52.97" E
            Radial Direction:   S 88A05'07.03" E
              Chord Direction:  N  0A13'18.70" E
            Radial Direction:   N 88A31'44.43" E
           Tangent Direction:   N  1A28'15.57" W

Element: Circular
                 PRC (    1004)          210+57.27 1028814.41338  633151.83601
                 PI (    5003)          219+03.90 1028792.67955  633998.19224
                 CC (    1009)                    1057451.60025  633887.21860
                 PT (    1010)          227+50.05 1028820.96718  634844.35478
                     Radius:             28646.63
                      Delta:        3A23'08.54" Right
  Degree of Curvature(Arc):         0A12'00.03"
                     Length:             1692.78
                    Tangent:              846.64
                      Chord:             1692.53
             Middle Ordinate:               12.50
                    External:               12.51
           Tangent Direction:   N  1A28'15.57" W
            Radial Direction:   N 88A31'44.43" E
              Chord Direction:  N  0A13'18.70" E
            Radial Direction:   S 88A05'07.03" E
           Tangent Direction:   N  1A54'52.97" E

Element: Linear
                 PT (    1010)          227+50.05 1028820.96718  634844.35478
                 POE (   9019)          235+84.63 1028848.85200  635678.46800
          Tangent Direction:   N  1A54'52.97" E
             Tangent Length:              834.58
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*PT NO.      EASTING       NORTHING
 1014  1028600.76471    627759.47084
 1015  1028624.96598    628089.16655
 1016  1028817.07369    633039.68101
 7623  1028646.92546    633044.58362
 7624  1028917.16348    633036.62072
 7625  1028467.31181    627763.27568
 7626  1028485.01283    627970.23387
 7627  1028842.52311    628082.25112
 7628  1028829.13664    627937.96076
 7629  1028824.00259    627881.38326
 7630  1028789.63178    627753.48425
```


SCALE 0 100 200 300 400 500 Feet

PLS	SJP		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	SJP		
CHECKED	KDF		SURVEY DATA SHEET
APPROVED			SWO 5356(1)
CREW	CLINTON		

COUNTY TEXAS HIGHWAY SH 94 STATE JOB NO. 33323(04) SHEET NO. S004

CHECK LEVELS & BENCH MARK LIST SWO 5356(1) NAVD 88 DATUM from Static GPS

BM NO.	RUN 1	RUN 2	MEAN DIFF.	ADJ. DIFF.	ADJ. ELEV.	SOURCE ELEVATION	BM DESCRIPTION
T-70-604						2784.24	ODOT BRASS MONUMENT SET IN CONCRETE POST 123.8 LT. STA. 163+11.9
TO	-12.990	-12.994	-12.992	-13.00			
BM #101					2771.24		TOP DELINEATOR POST 142.9 LT. STA. 170+50.9
TO	+17.642	+17.647	+17.6445	+17.64			
BM #102					2788.88		S.E. CORNER OF BRIDGE HUBGUARD 17.2 RT. STA. 181+12.3
TO	-12.470	-12.466	-12.468	-12.47			
BM #103					2776.41		S.E. CORNER OF N.E. WINGWALL OLD BRIDGE ABUTMENT 93.6 LT. STA. 192+11.4
TO	-3.905	-3.923	-3.914	-3.92			
BM #104					2772.49		TOP DELINEATOR POST 132.8 LT. STA. 201+48.7
TO	+19.489	+19.484	+19.4865	+19.49			
T-70-605						2791.98	ODOT BRASS MONUMENT SET IN CONCRETE POST 140.5 LT. STA. 207+16.9

SHEET 1 OF 1

SCALE 0 100 200 300 400 500 Feet

PLS	SJP	
DRAWN	SJP	
CHECKED	KDF	
APPROVED		
CREW	CLINTON	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5356(1)

COUNTY TEXAS HIGHWAY SH 94 STATE JOB NO. 33323(04) SHEET NO. S005

STATE OF OKLAHOMA
DEPARTMENT OF HIGHWAYS
SURVEY DIVISION
POSITION AND DESCRIPTION OF SURVEY MONUMENTS

S.D. FORM NO. 11
REVISED 01/01/2015

COUNTY Texas | Monument Number T-70-604 | SWO 53561(1) | DATE 3/27/19

TYPE OF MONUMENT ODOT 2" BRASS CAP IN CONC. MONUMENT SET FOR HORIZ. & VERT. CONTROL

WRITTEN DESCRIPTION OF LOCATION: THIS MONUMENT IS LOCATED APPROXIMATELY 2.7 MILES NORTH OF SH-94/SH-3 JCT. MONUMENT IS APPROXIMATELY 112' WEST OF WEST EDGE OF SH-94 AND 4' EAST OF FENCE CORNER POST.

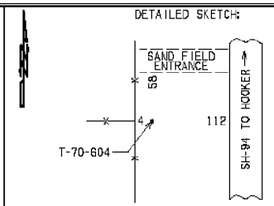
ESTABLISHED BY: STEVE PERRING, PLS 1817

COORDINATE SYSTEM: State Plane Coordinates ZONE: 3501 OK North
COORDINATES (FEET) X 1,028,529.03 Y 628,422.47

GEODETIC POSITION
LATITUDE 36°41'01.19878" NORTH
LONGITUDE 101°12'22.02724" WEST
ELLIPSOIDAL HEIGHT 2695.96 FEET
METHOD USED TO ESTABLISHED: NGS OPUS-PROJECT NETWORK ADJUSTMENT UTILIZING STATIC GPS OBSERVATIONS ON NGS CORS "OKGM".
SOURCE: NAD 83(2011)

ORTHOMETRIC HEIGHT
2784.24 FEET GEOID MODEL: GEOID12B GEOID SEPRATION: -88.28 FEET
METHOD USED TO ESTABLISHED: NGS OPUS-PROJECT NETWORK ADJUSTMENT UTILIZING STATIC GPS OBSERVATIONS ON NGS CORS "OKGM".
SOURCE: NAVD 88

GENERAL VICINITY:
SEC 34
T 3 N
R 17-ECM
T-70-604
△= CONTROL MONUMENT
⊙= LAND CORNER
▣= OTHER

DETAILED SKETCH:


STATE OF OKLAHOMA
DEPARTMENT OF HIGHWAYS
SURVEY DIVISION
POSITION AND DESCRIPTION OF SURVEY MONUMENTS

S.D. FORM NO. 11
REVISED 01/01/2015

COUNTY Texas | Monument Number T-70-605 | SWO 53561(1) | DATE 3/27/19

TYPE OF MONUMENT ODOT 2" BRASS CAP IN CONC. MONUMENT SET FOR HORIZ. & VERT. CONTROL

WRITTEN DESCRIPTION OF LOCATION: THIS MONUMENT IS LOCATED APPROXIMATELY 3.6 MILES NORTH OF SH-94/SH-3 JCT. MONUMENT IS APPROXIMATELY 128' WEST OF WEST EDGE OF SH-94 AND 28' NORTH OF NORTH EDGE GRAVEL DRIVE.

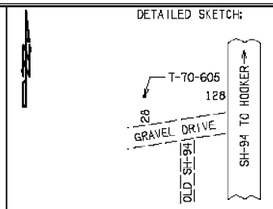
ESTABLISHED BY: STEVE PERRING, PLS 1817

COORDINATE SYSTEM: State Plane Coordinates ZONE: 3501 OK North
COORDINATES (FEET) X 1,028,580.65 Y 632,809.63

GEODETIC POSITION
LATITUDE 36°41'44.60510" NORTH
LONGITUDE 101°12'21.94519" WEST
ELLIPSOIDAL HEIGHT 2703.75 FEET
METHOD USED TO ESTABLISHED: NGS OPUS-PROJECT NETWORK ADJUSTMENT UTILIZING STATIC GPS OBSERVATIONS ON NGS CORS "OKGM".
SOURCE: NAD 83(2011)

ORTHOMETRIC HEIGHT
2791.96 FEET GEOID MODEL: GEOID12B GEOID SEPRATION: -88.23 FEET
METHOD USED TO ESTABLISHED: NGS OPUS-PROJECT NETWORK ADJUSTMENT UTILIZING STATIC GPS OBSERVATIONS ON NGS CORS "OKGM".
SOURCE: NAVD 88

GENERAL VICINITY:
SEC 27
T 3 N
R 17-ECM
T-70-605
△= CONTROL MONUMENT
⊙= LAND CORNER
▣= OTHER

DETAILED SKETCH:


SCALE 0 100 200 300 400 500 Feet

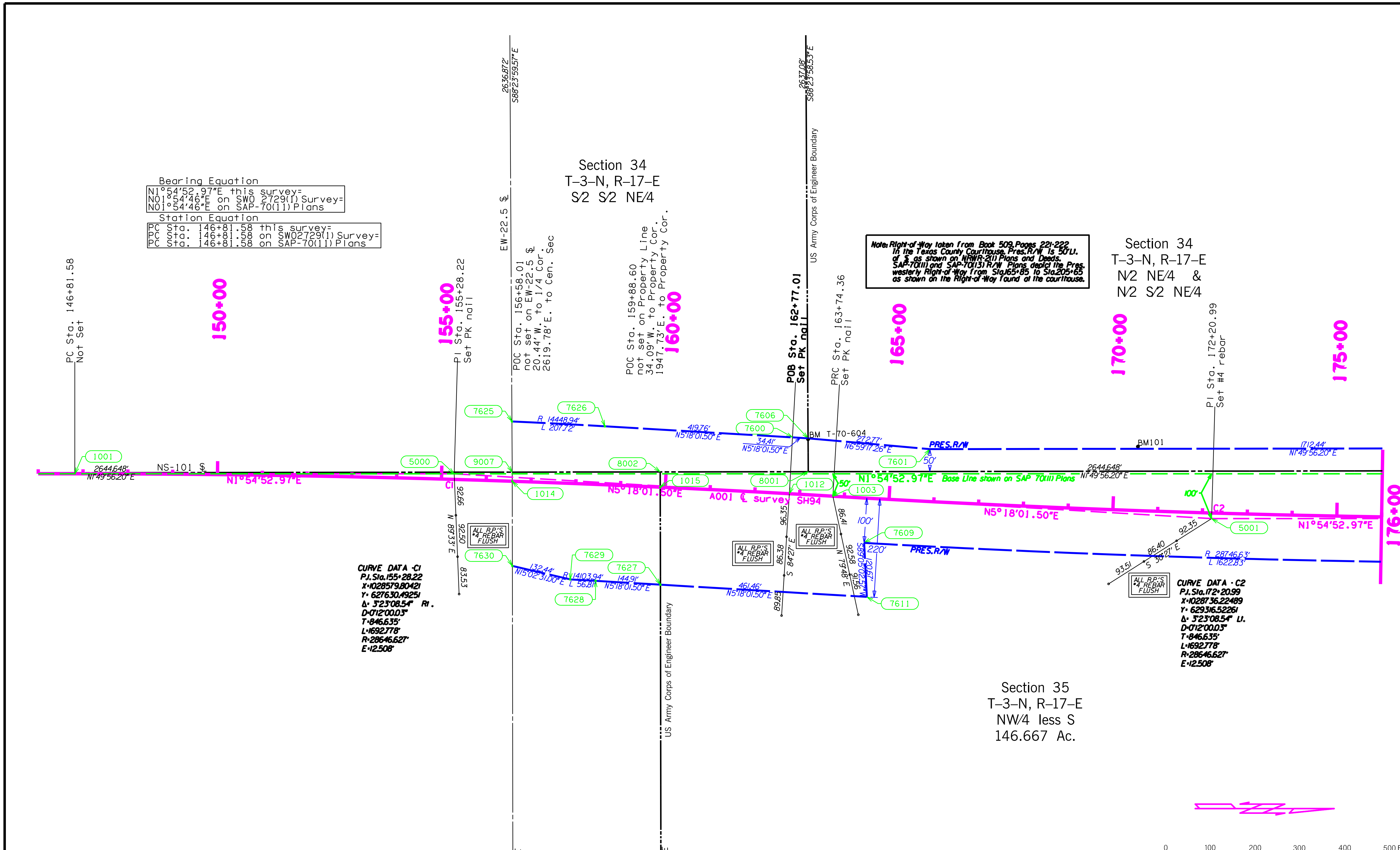
PLS	SJP	
DRAWN	SJP	
CHECKED	KDF	
APPROVED		
CREW	CLINTON	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 53561(1)

COUNTY TEXAS HIGHWAY SH 94 STATE JOB NO 33323(04) SHEET NO S006


Bearing Equation
N1°54'52.97"E this survey=
N01°54'46"E on SWO 2729(1) Survey=
N01°54'46"E on SAP-70(11) Plans
Station Equation
PC Sta. 146+81.58 this survey=
PC Sta. 146+81.58 on SW02729(1) Survey=
PC Sta. 146+81.58 on SAP-70(11) Plans
Section 34
T-3-N, R-17-E
S/2 S/2 NE/4
Section 34
T-3-N, R-17-E
N/2 NE/4 &
N/2 S/2 NE/4
Section 35
T-3-N, R-17-E
NW/4 less S
146.667 Ac.
Note: Right-of-Way taken from Book 509, Pages 221-222 in the Texas County Courthouse. Pres. R/W is 50'Lt. of ℄ as shown on NRWR-2(1) Plans and Deeds. SAP-70(11) and SAP-70(13) R/W Plans depict the Pres. westerly Right-of-Way from Sta.165+85 to Sta.205+65 as shown on the Right-of-Way found at the courthouse.
PC Sta. 146+81.58
Not Set
PI Sta. 155+28.22
Set PK nail
POC Sta. 156+58.01
not set on EW-22.5 ℄
20.44' W. to 1/4 Cor.
2619.78' E. to Cen. Sec
POC Sta. 159+88.60
not set on Property Line
34.09' W. to Property Cor.
1947.73' E. to Property Cor.
POB Sta. 162+77.01
Set PK nail
PRC Sta. 163+74.36
Set PK nail
PI Sta. 172+20.99
Set #4 rebar
150+00
155+00
160+00
165+00
170+00
175+00
176+00
EW-22.5 ℄
NS-101 ℄
US Army Corps of Engineer Boundary
N1°54'52.97"E
N5°18'01.50"E
A001 ℄ survey SH94
Base Line shown on SAP 70(11) Plans
PRES.R/W
BM T-70-604
BM101
ALL R.P.'S #4 REBAR FLUSH
CURVE DATA - C1
P.I. Sta. 155+28.22
X=1028579.80421
Y= 627630.49251
Δ= 3°23'08.54" Rt.
D=0°12'00.03"
T=846.635'
L=1692.778'
R=28646.627'
E=12.508'
CURVE DATA - C2
P.I. Sta. 172+20.99
X=1028736.22489
Y= 629316.52261
Δ= 3°23'08.54" Lt.
D=0°12'00.03"
T=846.635'
L=1692.778'
R=28646.627'
E=12.508'
SCALE
0 100 200 300 400 500 Feet

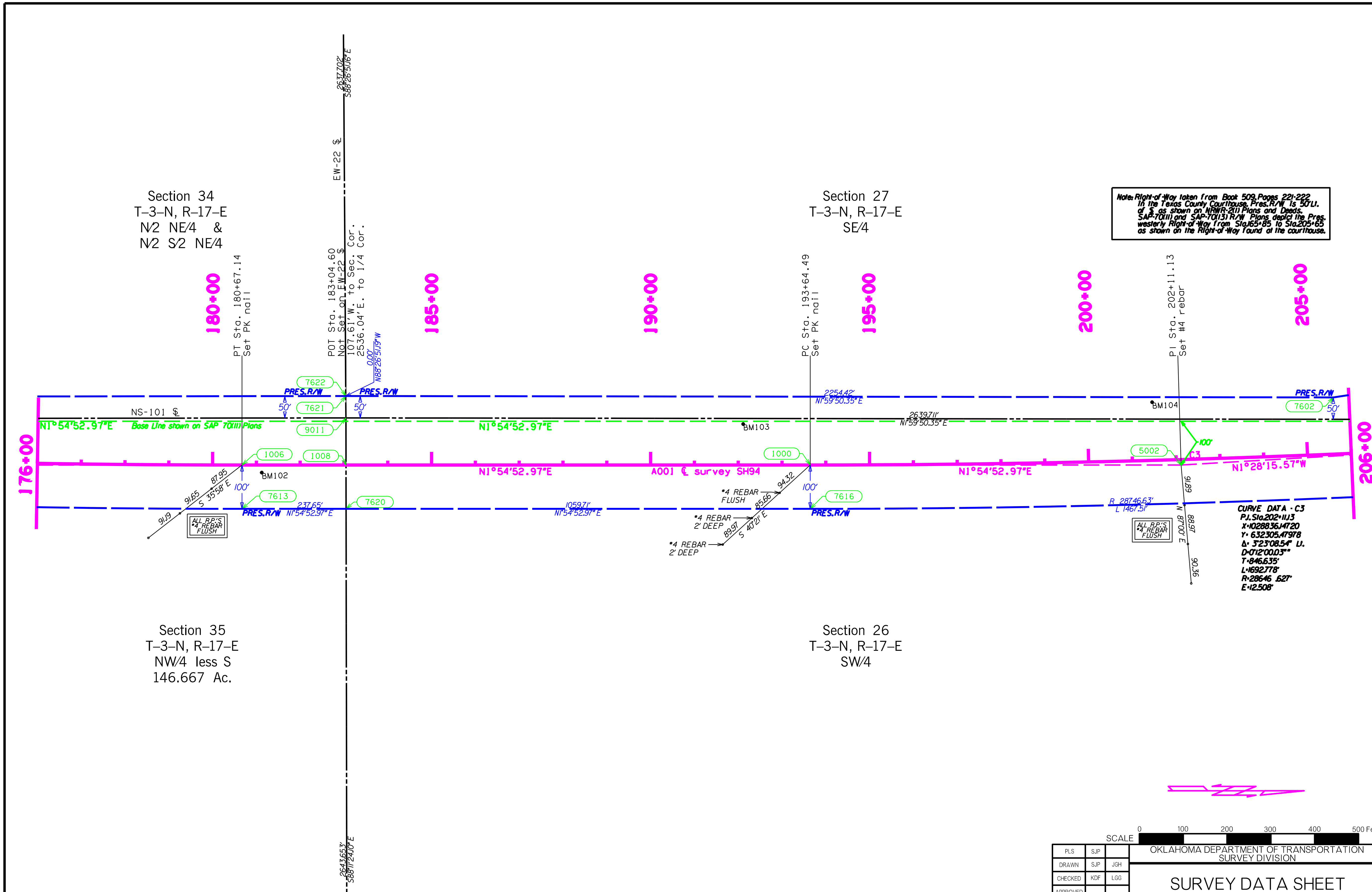
PLS	SJP	
DRAWN	SJP	JGH
CHECKED	KDF	LGG
APPROVED		
CREW	CLINTON	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5356(1)

COUNTY TEXAS HIGHWAY SH 94 STATE JOB NO. 33323(04) SHEET NO. S007



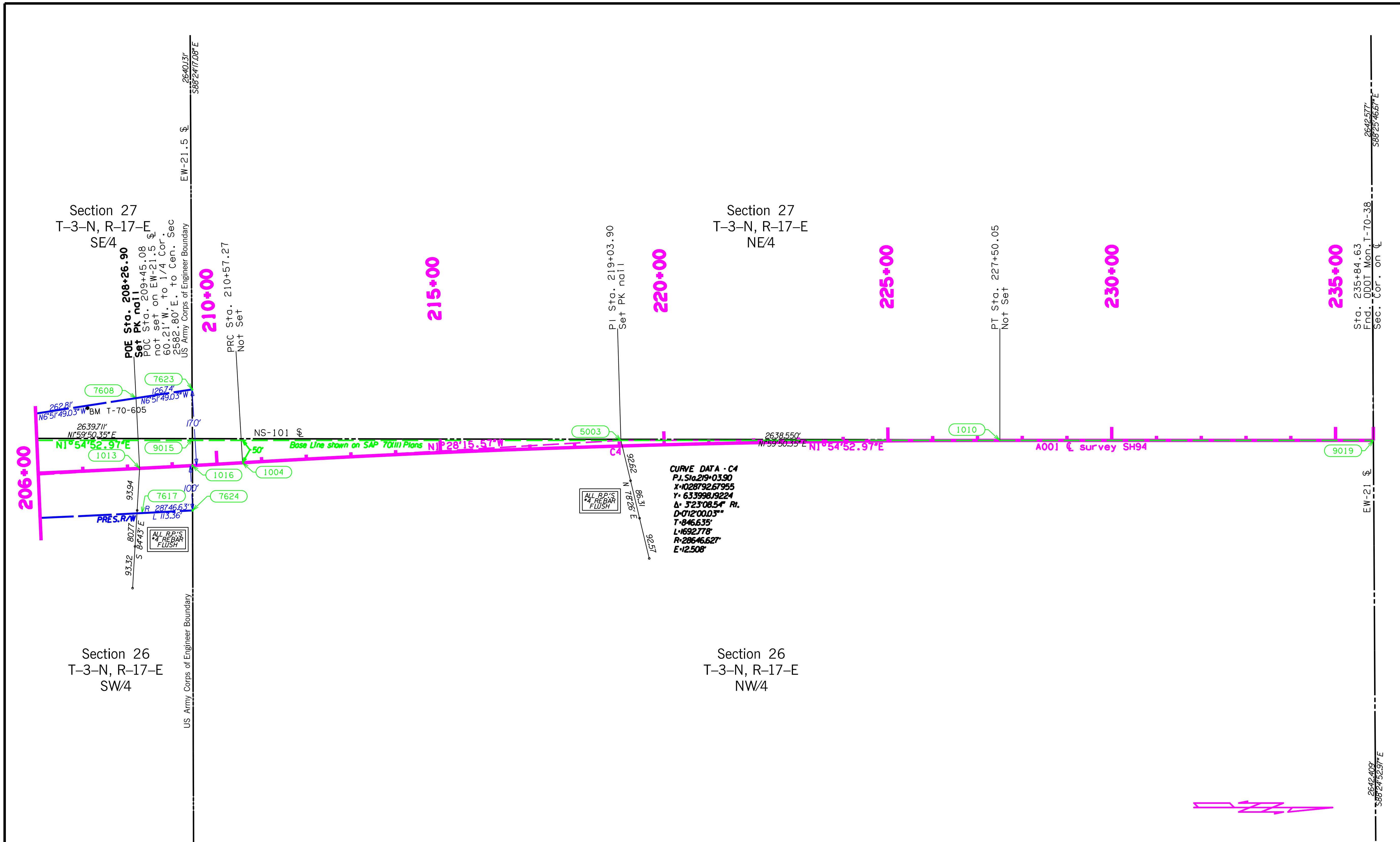
PLS	SJP	
DRAWN	SJP	JGH
CHECKED	KDF	LGG
APPROVED		
CREW	CLINTON	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5356(1)

COUNTY TEXAS HIGHWAY SH 94 STATE JOB NO. 33323(04) SHEET NO. S008



SCALE 0 100 200 300 400 500 Feet

PLS	SJP		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	SJP	JGH	
CHECKED	KDF	LGG	SURVEY DATA SHEET
APPROVED			SWO 5356(1)
CREW	CLINTON		

COUNTY TEXAS HIGHWAY SH 94 STATE JOB NO. 33323(04) SHEET NO. S009

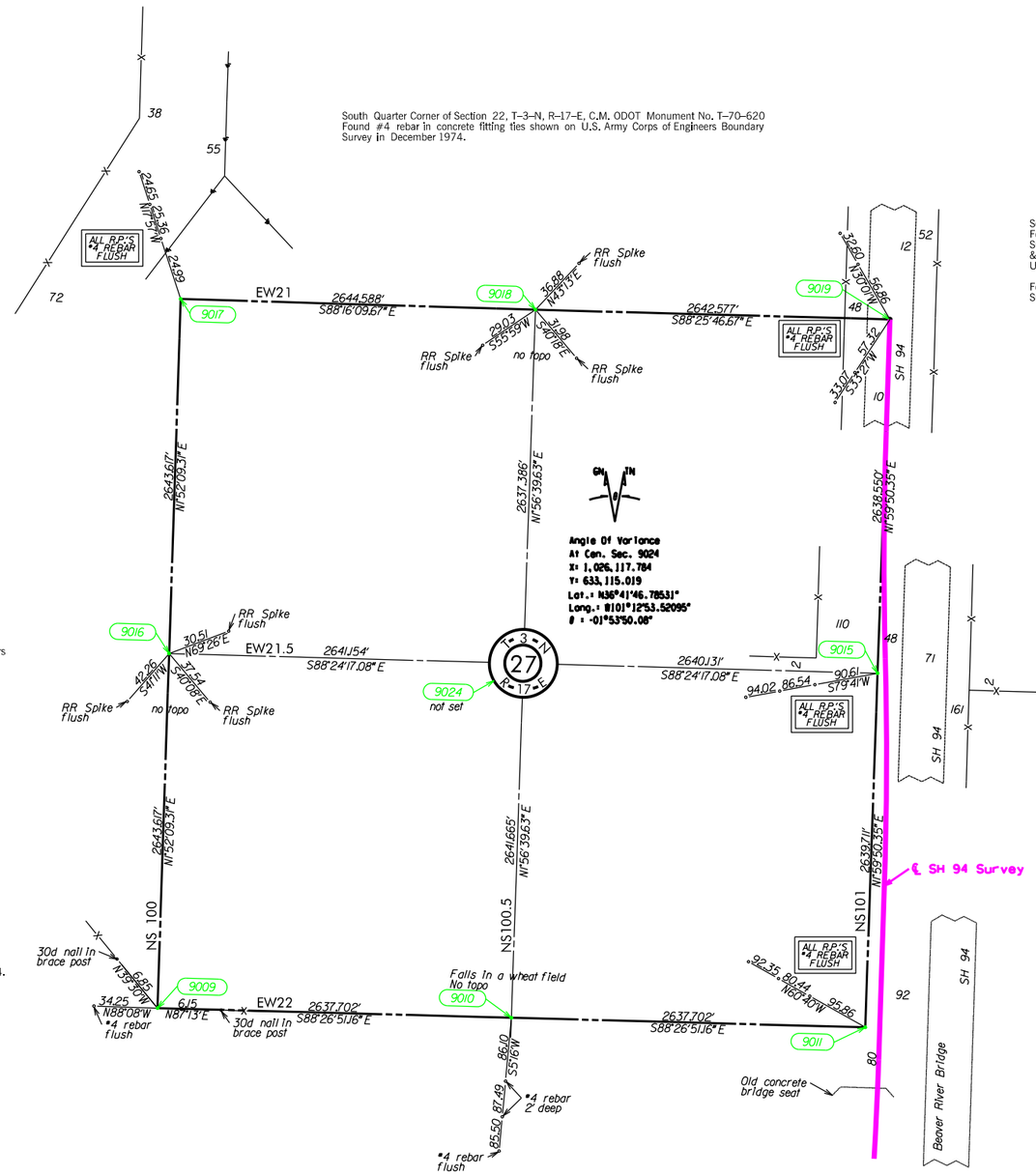
Southwest Corner of Section 22, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–619
Found #8 rebar fitting ties shown on U.S. Army Corps of Engineers Boundary Survey In December 1974.

West Quarter Corner of Section 27, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–618
Set #4 rebar with cap stamped LS1617 single proportionate measurement from section corners one half mile north and south.

Southwest Corner of Section 27, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–612
Found references shown on U.S. Army Corps of Engineers Boundary Survey In December 1974.

Set #4 rebar with cap stamped PLS1617 from ties shown on U.S. Army Corps of Engineers Boundary Survey in December 1974 and is 1' south of a rock. A iron pin was originally shown for the section corner. The rock was not originally shown on the USACE Survey, but was pencilled "rock for monument" sometime after 1974.

South Quarter Corner of Section 22, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–620
Found #4 rebar in concrete fitting ties shown on U.S. Army Corps of Engineers Boundary Survey in December 1974.



South Quarter Corner of Section 27, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–613
Set #4 rebar with cap stamped LS1617 single proportionate measurement from section corners one half mile east and west.

Southwest Corner of Section 23, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–38
Found ODOT brass cap Mon. No. T–70–38 and references shown on ODOT SW02729(1) Survey dated 1967. This also fit ties to drainage structure (Sta.235+07.7 on SW02729 & Sta.569+70.8 on ODOT NRWR 2–Sec.1 (1933) Plans) crossing SH94 within reason. Used as found

Found bent #4 rebar and references shown on U.S. Army Corps of Engineers Boundary Survey dated 1974 7.5'S 7°37'E of the ODOT brass cap.

West Quarter Corner of Section 26, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–37
Set #4 rebar with cap stamped PLS1617 online between section corners one half mile north and south and from evidence shown on U.S. Army Corps of Engineers Boundary Survey in December 1974. This also fit within 1' of ties shown on SW02729(1) Survey in 1967.

Southwest Corner of Section 26, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–614
Set #4 rebar with cap stamped PLS1617 from ties shown on ODOT SW02729(1) Survey in 1967.

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

SCALE 0 500 1000 1500 2000 2500 Feet

PLS	SJP	
DRAWN	KDF	
CHECKED	JGH	
APPROVED		
CREW	CLINTON	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5356(1)

COUNTY TEXAS HIGHWAY SH 94 STATE JOB NO. 33323(04) SHEET NO. S010

Southwest Corner of Section 23, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–38
Found ODOT brass cap Mon. No. T–70–38 and references shown on ODOT SW02729(1) Survey dated 1967. This also fit ties to drainage structure (Sta.235+07.7 on SW02729 & Sta.569+70.8 on ODOT NRWR 2–Sec.1 (1933) Plans) crossing SH94 within reason. Used as found

Found bent #4 rebar and references shown on U.S. Army Corps of Engineers Boundary Survey dated 1974 7.5' S 7°37' E of the ODOT brass cap.

South Quarter Corner of Section 23, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–621
Set #4 rebar with cap stamped LS1617 single proportionate measurement from section corners one half mile east and west.

Southwest Corner of Section 24, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–622
Found #3 rebar fitting ties shown on U.S. Army Corps of Engineers Boundary Survey in December 1974.

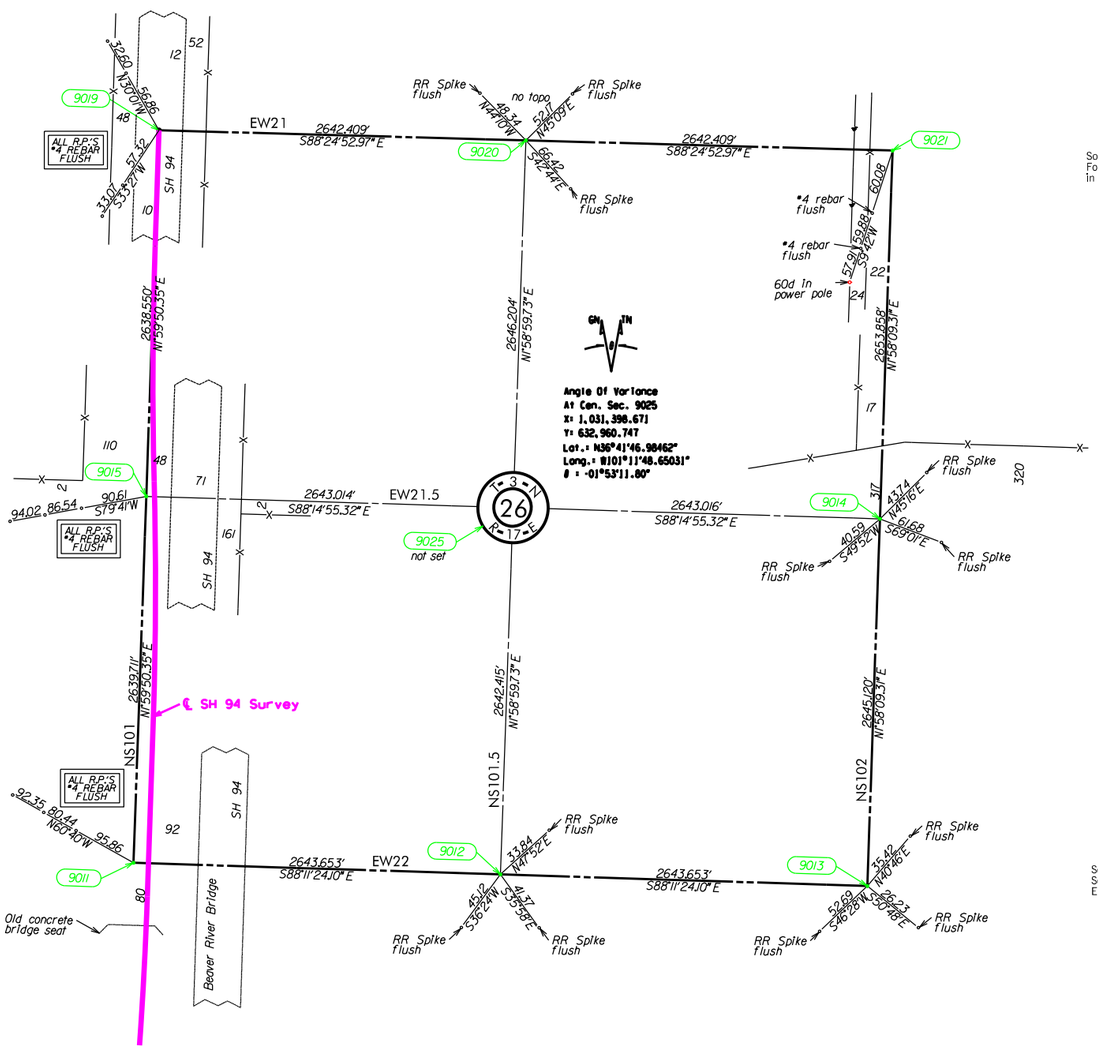
West Quarter Corner of Section 26, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–37
Set #4 rebar with cap stamped PLS1617 online between section corners one half mile north and south and from evidence shown on U.S. Army Corps of Engineers Boundary Survey in December 1974. This also fit within 1' of ties shown on SW02729(1) Survey in 1967.

West Quarter Corner of Section 25, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–617
Found original stone shown on U.S. Army Corps of Engineers Boundary Survey in December 1974. Set #5 rebar on the east side of original stone.

Southwest Corner of Section 26, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–614
Set #4 rebar with cap stamped PLS1617 from ties shown on ODOT SW02729(1) Survey in 1967.

Southwest Corner of Section 25, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–616
Set #4 rebar with cap stamped PLS1617 from ties shown on U.S. Army Corps of Engineers Boundary Survey in December 1974

South Quarter Corner of Section 26, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–615
Set #4 rebar with cap stamped LS1617 single proportionate measurement from section corners one half mile east and west.



NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

SCALE 0 500 1000 1500 2000 2500 Feet

PLS	SJP	
DRAWN	KDF	
CHECKED	JGH	
APPROVED		
CREW	CLINTON	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5356(1)

COUNTY TEXAS HIGHWAY SH 94 STATE JOB NO 33323(04) SHEET NO 5011

Southwest Corner of Section 27, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–612
Found references shown on U.S. Army Corps of Engineers Boundary Survey in December 1974.

Set #4 rebar with cap stamped PLS1617 from ties shown on U.S. Army Corps of Engineers Boundary Survey in December 1974 and is 1' south of a rock. A iron pin was originally shown for the section corner. The rock was not originally shown on the USACE Survey, but was penciled "rock for monument" sometime after 1974.

South Quarter Corner of Section 27, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–613
Set #4 rebar with cap stamped LS1617 single proportionate measurement from section corners one half mile east and west.

Southwest Corner of Section 26, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–614
Set #4 rebar with cap stamped PLS1617 from ties shown on ODOT SW02729(1) Survey in 1967.

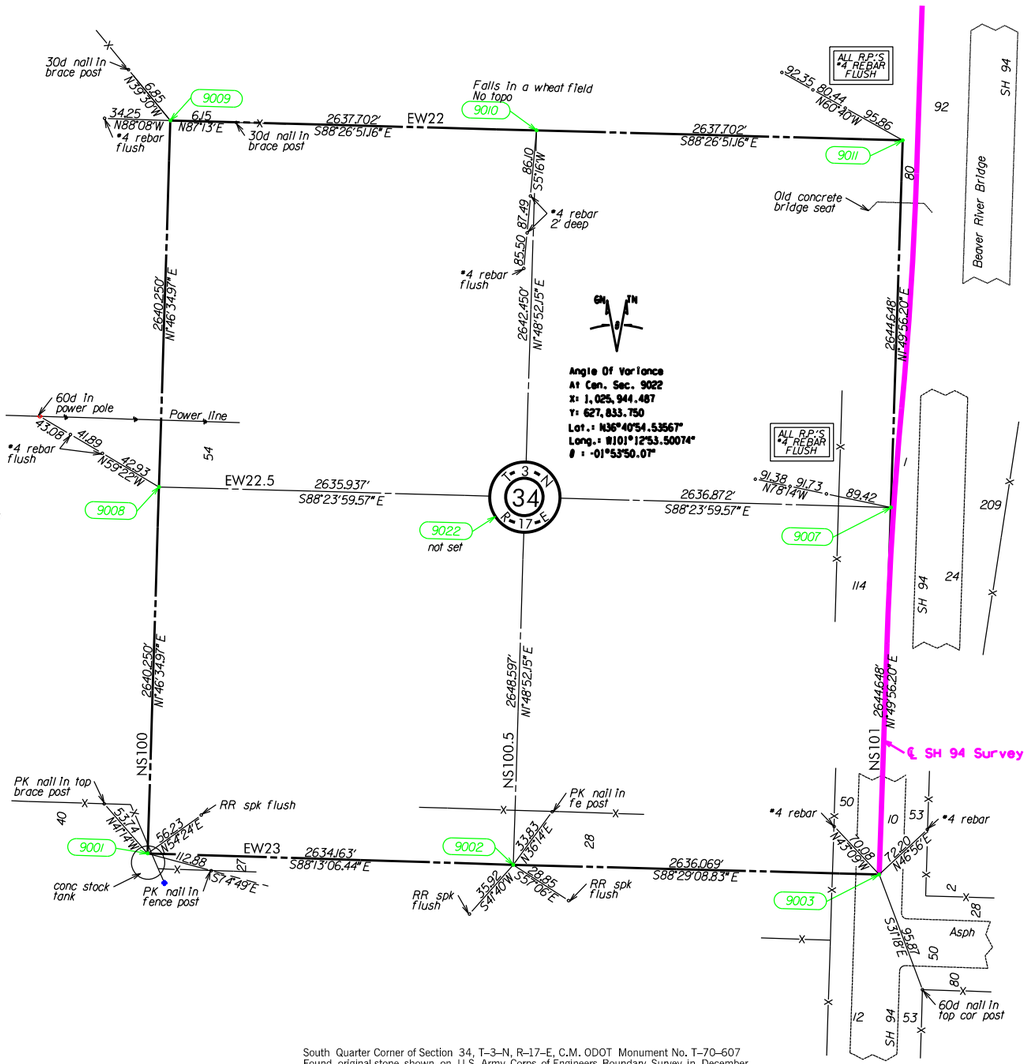
West Quarter Corner of Section 34, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–611
Found #4 rebar in concrete post single proportionate measurement from section corners one half mile north and south as shown on U.S. Army Corps of Engineers Boundary Survey in December 1974.

West Quarter Corner of Section 35, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–36
Set #4 rebar with cap stamped PLS1617 single proportionate measurement from section corners one half mile north and south as shown on ODOT SW02729(1) Survey in 1967. This also fit ties shown U.S. Army Corps of Engineers Boundary Survey in 1974.

Southwest Corner of Section 34, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–606
Found "X" in concrete water tank shown on U.S. Army Corps of Engineers Boundary Survey in December 1974.

South Quarter Corner of Section 34, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–607
Found original stone shown on U.S. Army Corps of Engineers Boundary Survey in December 1974.

Southwest Corner of Section 35, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–35
Found ODOT Brass Cap Mon. No. T–70–35 and references shown on ODOT SW02729(1) Survey in 1967 and used by U.S. Army Corps of Engineers Boundary Survey.



NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

SCALE 0 500 1000 1500 2000 2500 Feet

PLS	SJP	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	KDF	
CHECKED	JGH	SURVEY DATA SHEET
APPROVED		SWO 5356(1)
CREW	CLINTON	

COUNTY TEXAS HIGHWAY SH 94 STATE JOB NO. 33323(04) SHEET NO. S012

South Quarter Corner of Section 26, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–615
Set #4 rebar with cap stamped LS1617 single proportionate measurement from section corners one half mile east and west.

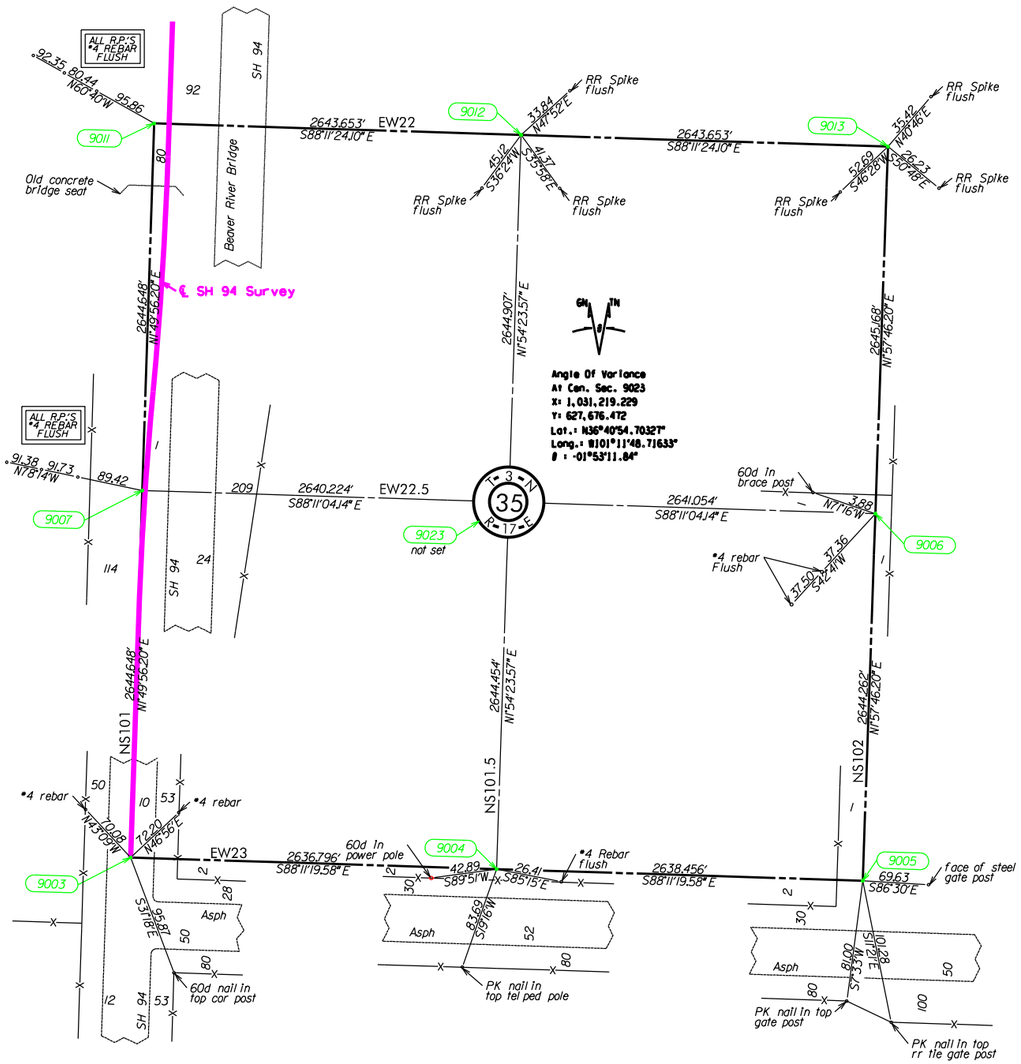
Southwest Corner of Section 26, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–614
Set #4 rebar with cap stamped PLS1617 from ties shown on ODOT SW02729(1) Survey in 1967.

Southwest Corner of Section 25, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–616
Set #4 rebar with cap stamped PLS1617 from ties shown on U.S. Army Corps of Engineers Boundary Survey in December 1974

West Quarter Corner of Section 35, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–36
Set #4 rebar with cap stamped PLS1617 single proportionate measurement from section corners one half mile north and south as shown on ODOT SW02729(1) Survey in 1967. This also fit ties shown U.S. Army Corps of Engineers Boundary Survey in 1974.

West Quarter Corner of Section 36, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–610
Found original stone shown on U.S. Army Corps of Engineers Boundary Survey in December 1974.

Found #3 rebar 1' north of original stone used for marking the USACE Boundary.



Southwest Corner of Section 35, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–35
Found ODOT Brass Cap Mon. No. T–70–35 and references shown on ODOT SW02729(1) Survey in 1967 and used by U.S. Army Corps of Engineers Boundary Survey.

South Quarter Corner of Section 35, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–608
Found brass cap shown on U.S. Army Corps of Engineers Boundary Survey in December 1974.

Southwest Corner of Section 36, T–3–N, R–17–E, C.M. ODOT Monument No. T–70–609
Found Brass Cap shown on U.S. Army Corps of Engineers Boundary Survey.

NOTE: REFERENCE'S SHOWN ARE NOT TO SCALE.

SCALE 0 500 1000 1500 2000 2500 Feet

PLS	SJP	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	KDF	
CHECKED	JGH	SURVEY DATA SHEET
APPROVED		SWO 5356(1)
CREW	CLINTON	

COUNTY TEXAS HIGHWAY SH 94 STATE JOB NO. 33323(04) SHEET NO. S013

CEC // TRANSPORTATION

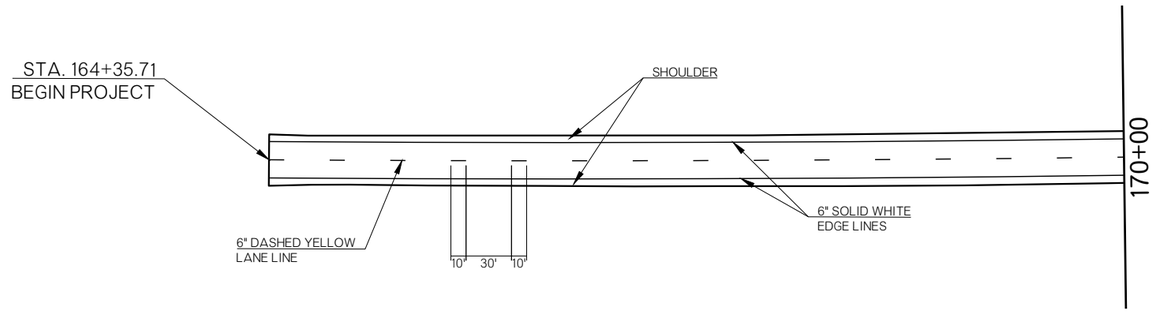
REVISIONS

DESCRIPTION	DATE

155+00

160+00

165+00



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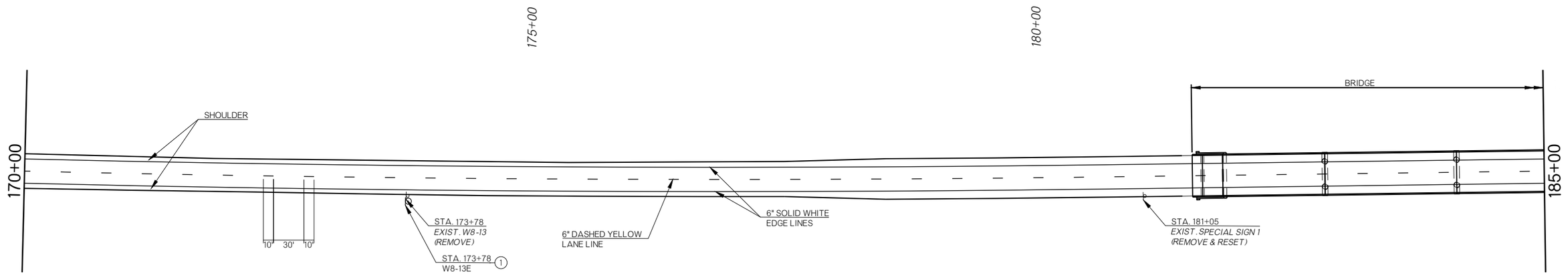

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SH-94 TEXAS COUNTY

SIGNING AND STRIPING
SHEET 1 OF 2

JOB PIECE NO. 33323(04) SHEET NO. T001

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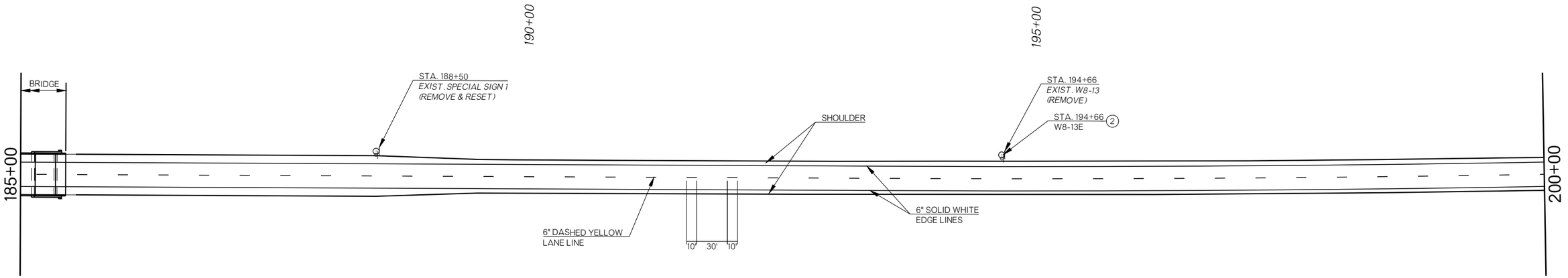
CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE



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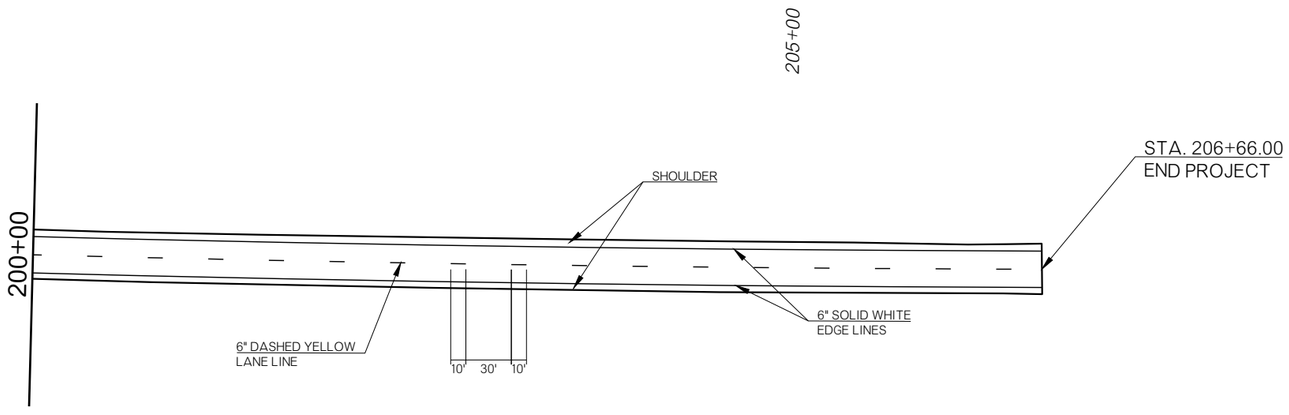

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SH-94 TEXAS COUNTY

SIGNING AND STRIPING
SHEET 2 OF 2

JOB PIECE NO. 33323(04) SHEET NO. T002

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CEC // TRANSPORTATION

REVISIONS

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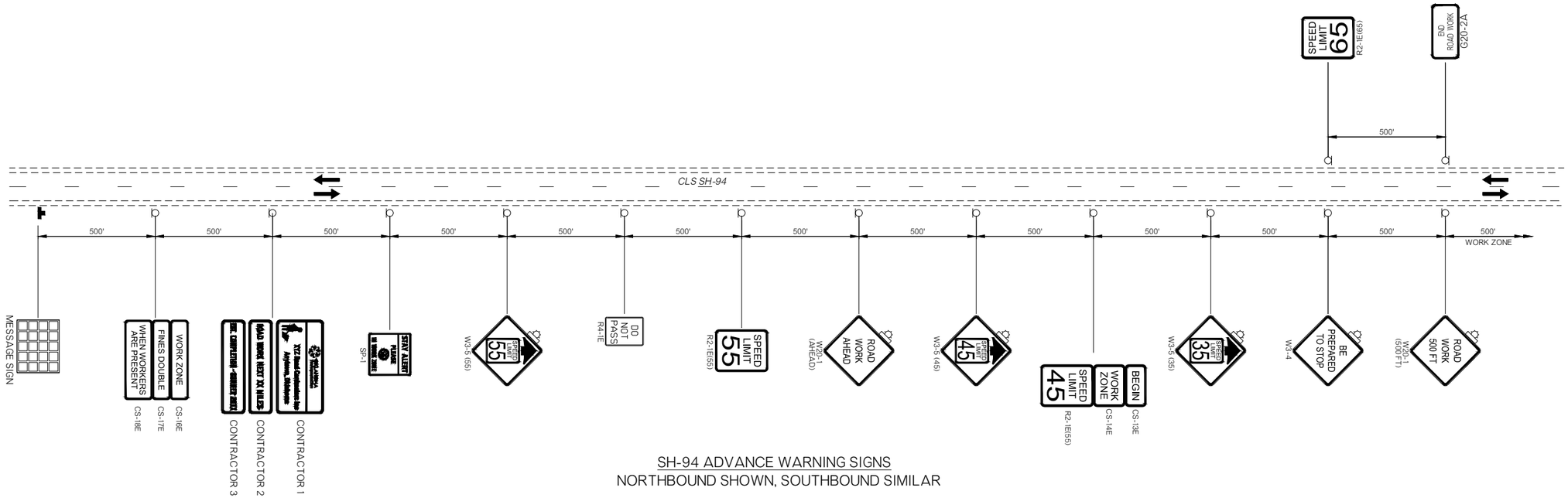
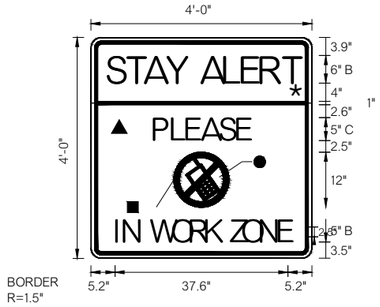


SH-94 ADVANCE WARNING SIGNS
NORTHBOUND SHOWN, SOUTHBOUND SIMILAR



BORDER
R=1.5"
TH=0.75"
IN=0.75"

COLOR:
LEGEND, SYMBOL AND BORDER:
BLACK (NON-REFLECTORIZED)
■ RED (TRANSPARENT REFLECTORIZED)
BACKGROUND:
▲ FLUORESCENT ORANGE (REFLECTORIZED)
★ FLUORESCENT YELLOW (REFLECTORIZED)
● WHITE (REFLECTORIZED)

LEGEND

- TEMP. CONSTRUCTION
- PERM. CONSTRUCTION
- PREV. CONSTRUCTION
- PORT. LONG. BARRIER
- CONST. ZONE IMPACT ATTENUATOR
- SIGN
- DRUM
- TYPE III BARRICADE
- PORTABLE TRAFFIC SIGNAL

NOTES

TEMPORARY PAVEMENT MARKING SHALL INCLUDE "REMOVABLE PAVEMENT MARKING TAPE (4" WIDE)" WITH CLASS A PAVEMENT MARKERS.

INCLUDE CLASS A PAVEMENT MARKERS AS SHOWN:
FOR YELLOW STRIPING, USE TYPE 2-D (AMBER/AMBER)
FOR WHITE STRIPING, USE TYPE 2-C (CRYSTAL/RED)

FOR CLASS A PAVEMENT MARKER SPACING USE:
TAPERS 5' TANGENTS 40'

ANY EXISTING CONFLICTING SIGNS SHOULD BE COVERED DURING CONSTRUCTION. SEE T00X FOR ADVANCE WARNING.

USE STANDARD TCS21-1 FOR ADDITIONAL INFORMATION ON CONSTRUCTION ZONE PAVEMENT MARKINGS.

FOR DRUM AND CHANNELIZING CONE SPACING USE:
SHIFT TAPER 50' TANGENT 100'
MERGE TAPER 50'

SH-94 TEXAS COUNTY

ADVANCED WARNING SIGNAGE

JOB PIECE NO. 33323(04) SHEET NO. T003

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CEC // TRANSPORTATION

REVISIONS

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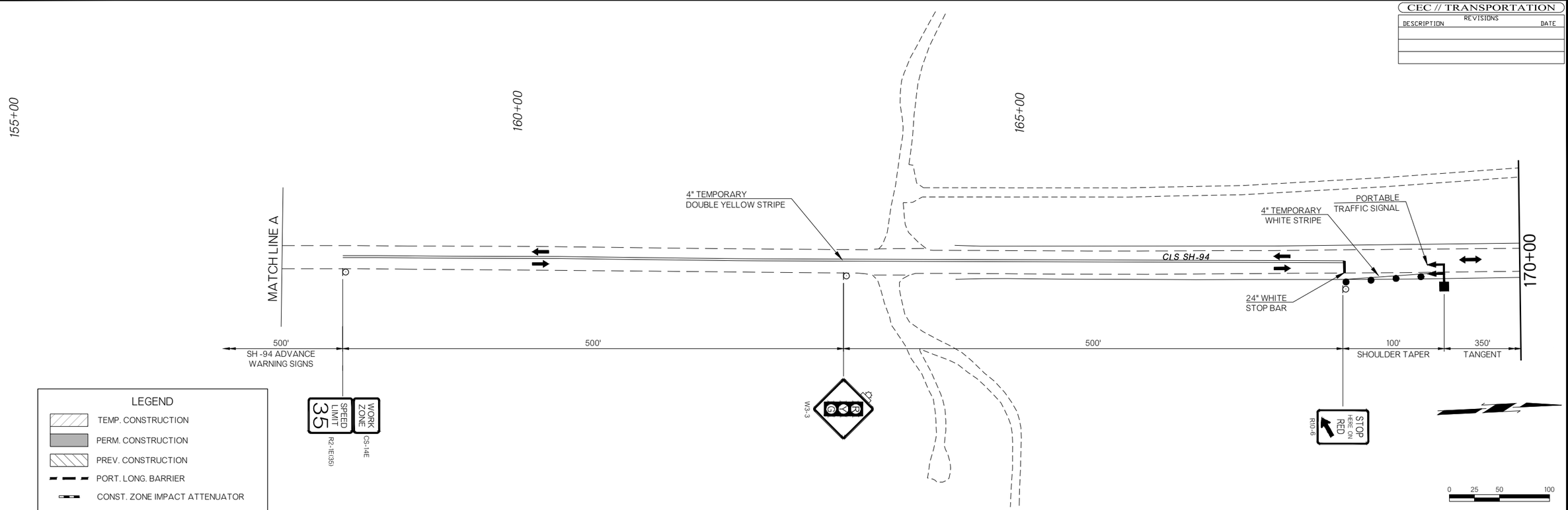
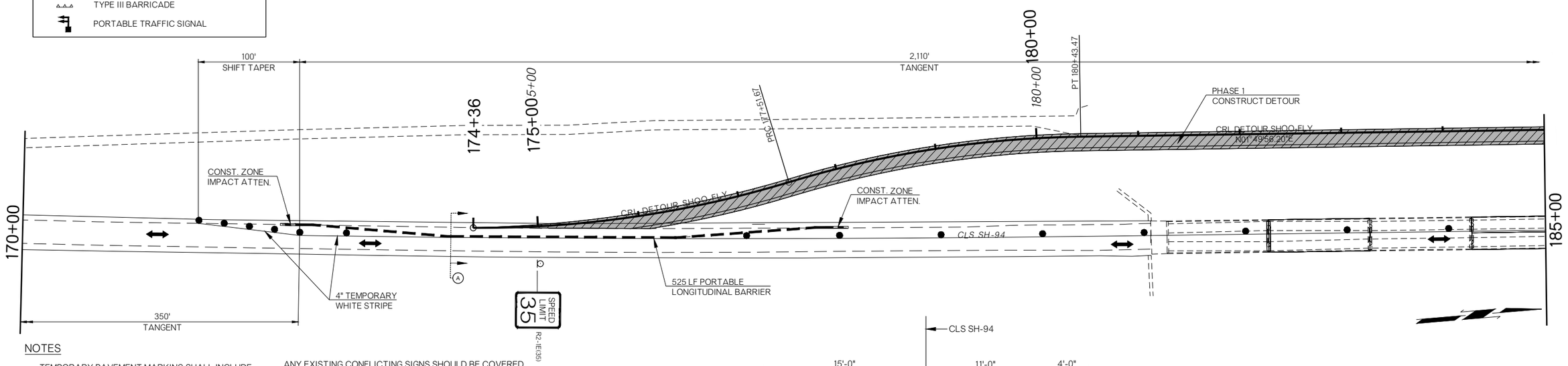
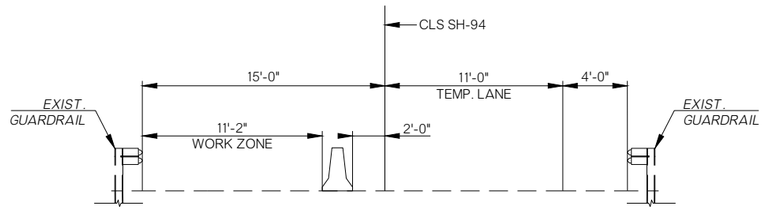


LEGEND

- TEMP. CONSTRUCTION
- PERM. CONSTRUCTION
- PREV. CONSTRUCTION
- PORT. LONG. BARRIER
- CONST. ZONE IMPACT ATTENUATOR
- SIGN
- DRUM
- TYPE III BARRICADE
- PORTABLE TRAFFIC SIGNAL





SECTION A

NOTES

TEMPORARY PAVEMENT MARKING SHALL INCLUDE "REMOVABLE PAVEMENT MARKING TAPE (4" WIDE) WITH CLASS A PAVEMENT MARKERS.

INCLUDE CLASS A PAVEMENT MARKERS AS SHOWN:
FOR YELLOW STRIPING, USE TYPE 2-D (AMBER/AMBER)
FOR WHITE STRIPING, USE TYPE 2-C (CRYSTAL/RED)

FOR CLASS A PAVEMENT MARKER SPACING USE:
TAPERS 5' TANGENTS 40'

ANY EXISTING CONFLICTING SIGNS SHOULD BE COVERED DURING CONSTRUCTION. SEE T003 FOR ADVANCE WARNING.

USE STANDARD TCS21-1 FOR ADDITIONAL INFORMATION ON CONSTRUCTION ZONE PAVEMENT MARKINGS.

FOR DRUM AND CHANNELIZING CONE SPACING USE:
SHIFT TAPER 50' TANGENT 100'
MERGE TAPER 50'

SH-94 TEXAS COUNTY

TEMPORARY TRAFFIC CONTROL PHASE 1 SHEET 1 OF 2

JOB PIECE NO. 33323(04) SHEET NO. T004

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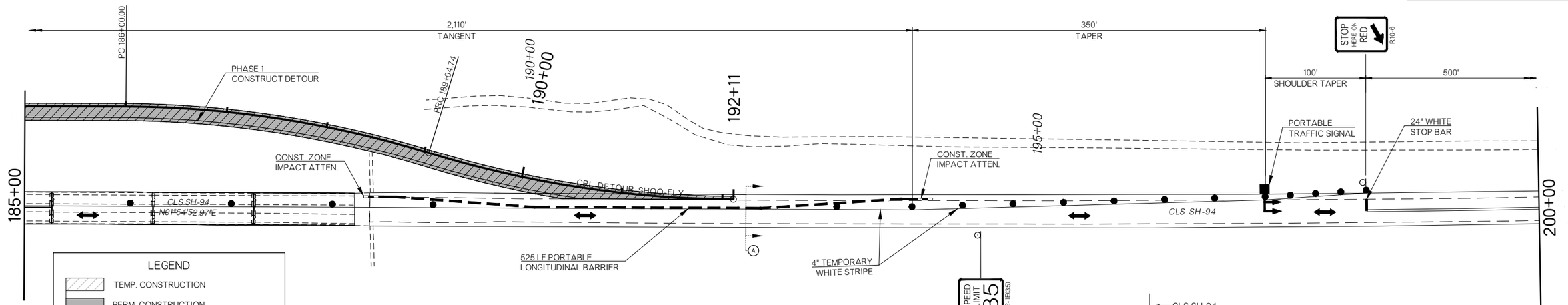
CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE



LEGEND

- TEMP. CONSTRUCTION
- PERM. CONSTRUCTION
- PREV. CONSTRUCTION
- PORT. LONG. BARRIER
- CONST. ZONE IMPACT ATTENUATOR
- SIGN
- DRUM
- TYPE III BARRICADE
- PORTABLE TRAFFIC SIGNAL

NOTES

TEMPORARY PAVEMENT MARKING SHALL INCLUDE "REMOVABLE PAVEMENT MARKING TAPE (4" WIDE) WITH CLASS A PAVEMENT MARKERS.

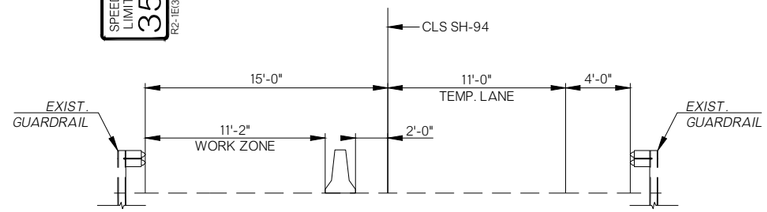
INCLUDE CLASS A PAVEMENT MARKERS AS SHOWN:
FOR YELLOW STRIPING, USE TYPE 2-D (AMBER/AMBER)
FOR WHITE STRIPING, USE TYPE 2-C (CRYSTAL/RED)

FOR CLASS A PAVEMENT MARKER SPACING USE:
TAPERS 5' TANGENTS 40'

ANY EXISTING CONFLICTING SIGNS SHOULD BE COVERED DURING CONSTRUCTION. SEE T003 FOR ADVANCE WARNING.

USE STANDARD TCS21-1 FOR ADDITIONAL INFORMATION ON CONSTRUCTION ZONE PAVEMENT MARKINGS.

FOR DRUM AND CHANNELIZING CONE SPACING USE:
SHIFT TAPER 50' TANGENT 100'
MERGE TAPER 50'



SECTION A

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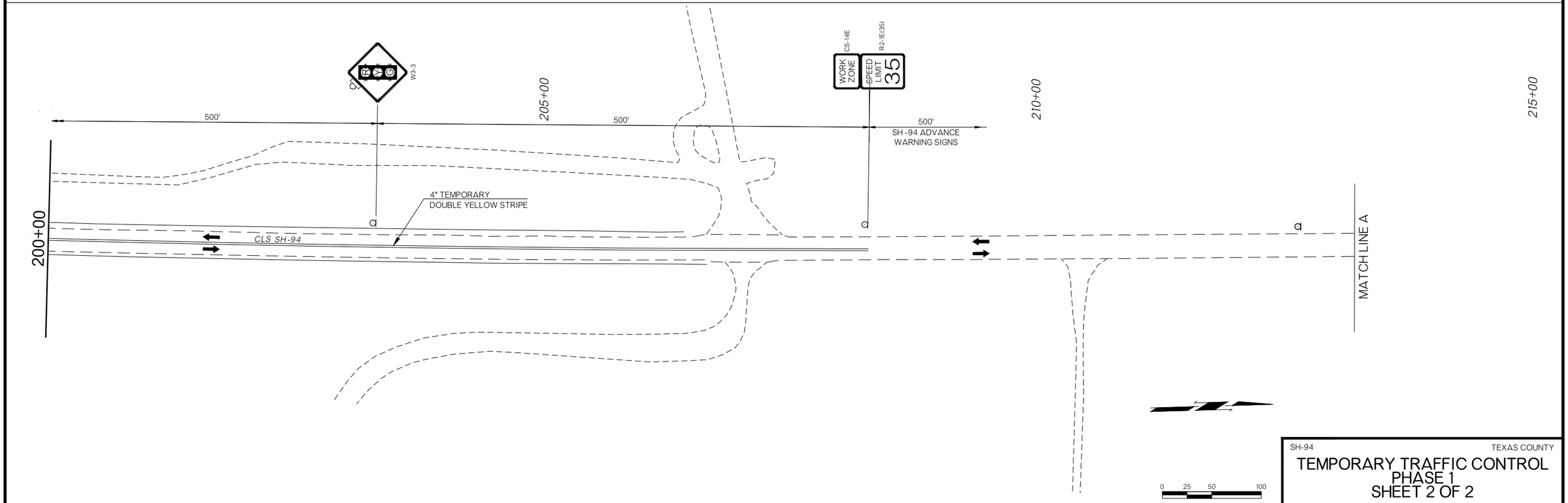

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SH-94 TEXAS COUNTY

TEMPORARY TRAFFIC CONTROL PHASE 1 SHEET 2 OF 2

JOB PIECE NO. 33323(04) SHEET NO. T005

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CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE

155+00

160+00

165+00

170+00

MATCH LINE A

4" TEMPORARY
DOUBLE YELLOW STRIPE

CLS SH-94

4" TEMPORARY
WHITE STRIPE

PORTABLE
TRAFFIC SIGNAL

24" WHITE
STOP BAR

500'
SH -94 ADVANCE
WARNING SIGNS

500'

500'

100'
SHOULDER TAPER

375'
TAPER

SPEED LIMIT 35 R2-1(35)

WORK ZONE CS-14E

W3-3

STOP HERE ON RED R10-6

0 25 50 100

LEGEND

- TEMP. CONSTRUCTION
- PERM. CONSTRUCTION
- PREV. CONSTRUCTION
- PORT. LONG. BARRIER
- CONST. ZONE IMPACT ATTENUATOR
- SIGN
- DRUM
- TYPE III BARRICADE
- PORTABLE TRAFFIC SIGNAL

NOTES

TEMPORARY PAVEMENT MARKING SHALL INCLUDE "REMOVABLE PAVEMENT MARKING TAPE (4" WIDE) WITH CLASS A PAVEMENT MARKERS.

INCLUDE CLASS A PAVEMENT MARKERS AS SHOWN:
FOR YELLOW STRIPING, USE TYPE 2-D (AMBER/AMBER)
FOR WHITE STRIPING, USE TYPE 2-C (CRYSTAL/RED)

FOR CLASS A PAVEMENT MARKER SPACING USE:
TAPERS 5' TANGENTS 40'

ANY EXISTING CONFLICTING SIGNS SHOULD BE COVERED DURING CONSTRUCTION. SEE T00X FOR ADVANCE WARNING.

USE STANDARD TCS21-1 FOR ADDITIONAL INFORMATION ON CONSTRUCTION ZONE PAVEMENT MARKINGS.

FOR DRUM AND CHANNELIZING CONE SPACING USE:
SHIFT TAPER 50' TANGENT 100'
MERGE TAPER 50'

175+00

180+00

180+00

SPEED LIMIT 35 R2-1(35)

W1-4(L)

4" TEMPORARY
WHITE STRIPE

CRL DETOUR SHOO-FLY
N01°49'56.20"E

174+36

175+00

170+00

4" TEMPORARY
WHITE STRIPE

CLS SH-94

CLS SH-94
N01°54'52.97"E

185+00

375'
TAPER

220'
TANGENT

100'
SHIFT TAPER

(3) TYPE III BARRICADE
(6) TYPE "A" WARNING LIGHTS W/

ROAD CLOSED R11-2

W1-4(L)

0 25 50 100

CRL SH-94
DETOUR SHOO-FLY

3'-0" SHLDR.

11'-0" DRIVING LANE

3'-0" SHLDR.

SECTION A

SH-94 TEXAS COUNTY

TEMPORARY TRAFFIC CONTROL PHASE 2 SHEET 1 OF 2

JOB PIECE NO. 33323(04) SHEET NO. T006

N:\OKC\Transportation\Highway\Production\ODOT\200078-ODOT-CI-2223-SH-94 over Beaver River\Project Drawings\Temp. Traffic\Temp. Traffic Details\3332304-TEMPORARY TRAFFIC CONTROL PHASE 2.dwg
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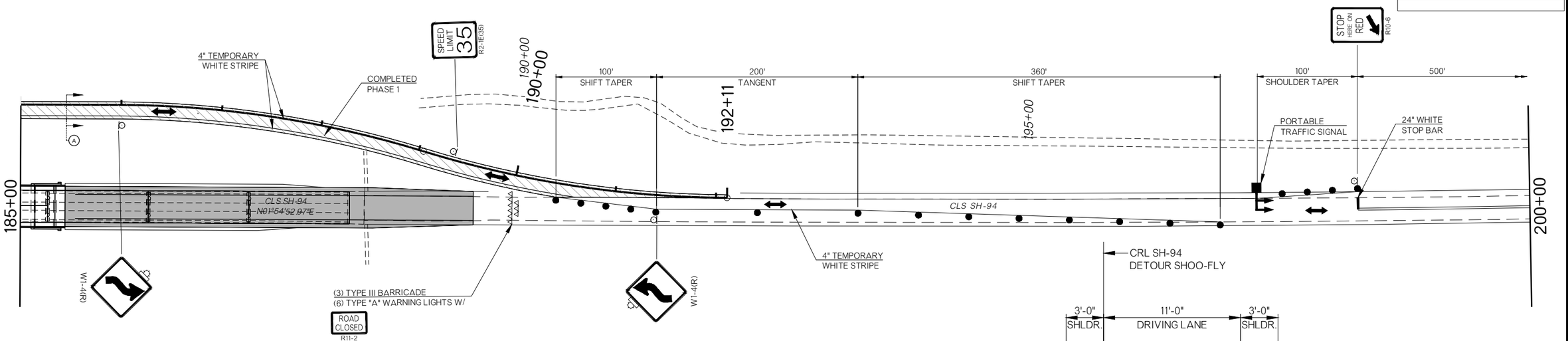
CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE



SECTION A

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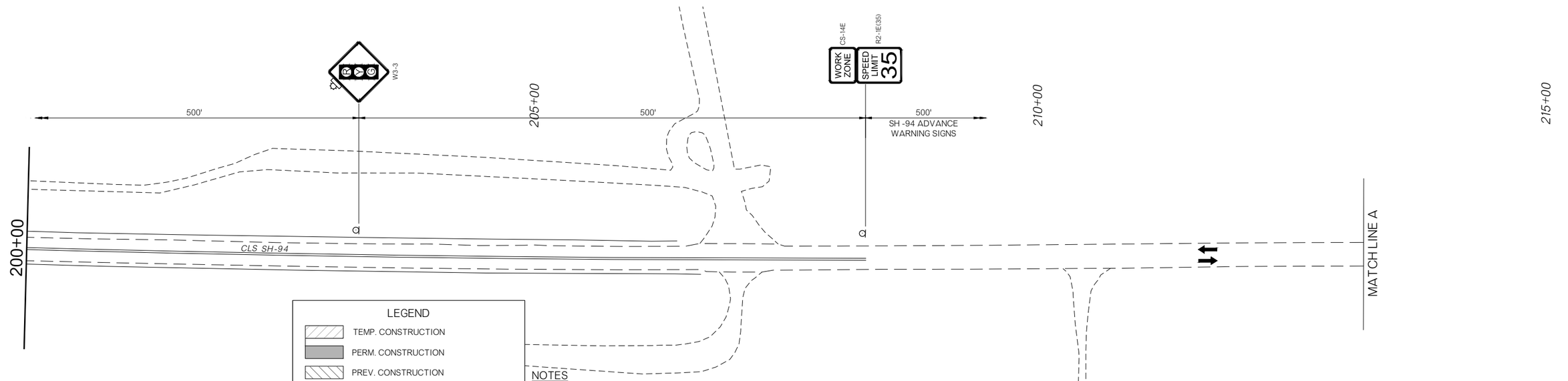

LEGEND

- TEMP. CONSTRUCTION
- PERM. CONSTRUCTION
- PREV. CONSTRUCTION
- PORT. LONG. BARRIER
- CONST. ZONE IMPACT ATTENUATOR
- SIGN
- DRUM
- TYPE III BARRICADE
- PORTABLE TRAFFIC SIGNAL

NOTES

TEMPORARY PAVEMENT MARKING SHALL INCLUDE "REMOVABLE PAVEMENT MARKING TAPE (4" WIDE) WITH CLASS A PAVEMENT MARKERS.

INCLUDE CLASS A PAVEMENT MARKERS AS SHOWN:
FOR YELLOW STRIPING, USE TYPE 2-D (AMBER/AMBER)
FOR WHITE STRIPING, USE TYPE 2-C (CRYSTAL/RED)

FOR CLASS A PAVEMENT MARKER SPACING USE:
TAPERS 5' TANGENTS 40'

ANY EXISTING CONFLICTING SIGNS SHOULD BE COVERED DURING CONSTRUCTION. SEE T00X FOR ADVANCE WARNING.

USE STANDARD TCS21-1 FOR ADDITIONAL INFORMATION ON CONSTRUCTION ZONE PAVEMENT MARKINGS.

FOR DRUM AND CHANNELIZING CONE SPACING USE:
SHIFT TAPER 50' TANGENT 100'
MERGE TAPER 50'

0 25 50 100

SH-94 TEXAS COUNTY

TEMPORARY TRAFFIC CONTROL PHASE 2 SHEET 2 OF 2

JOB PIECE NO. 33323(04) SHEET NO. T007

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CEC // TRANSPORTATION

REVISIONS

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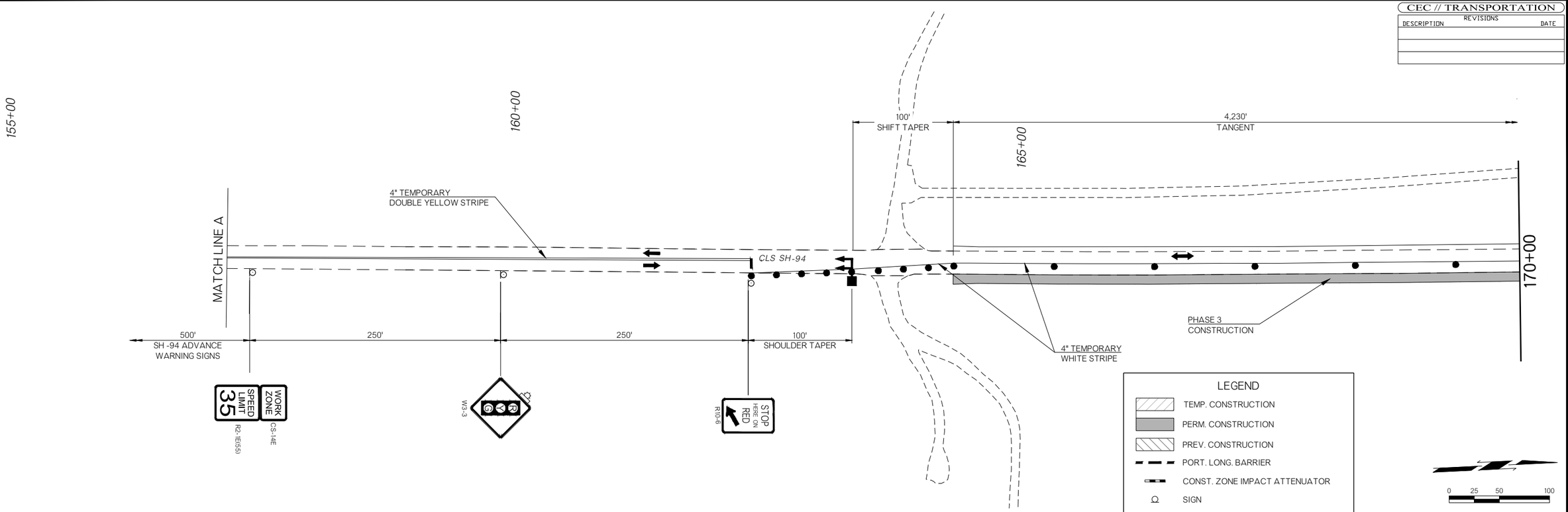

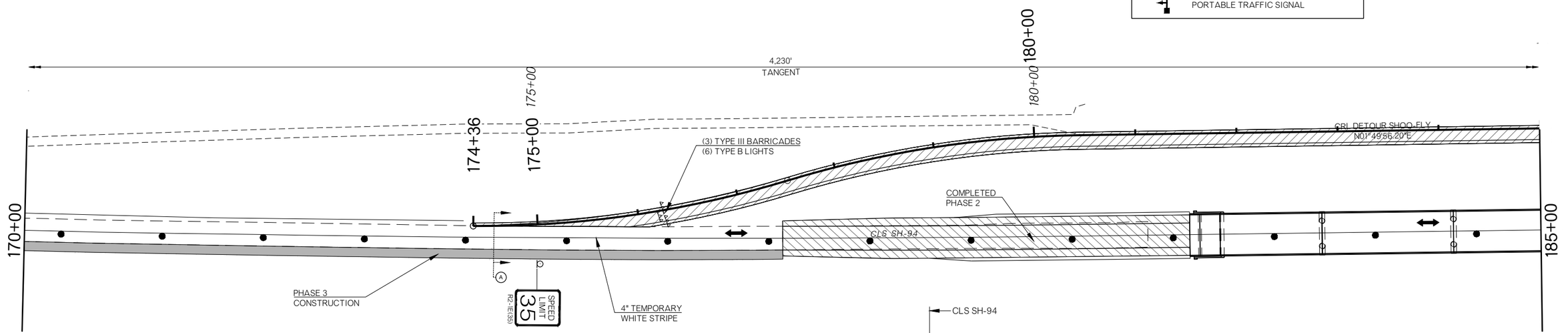

NOTES

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USE STANDARD TCS21-1 FOR ADDITIONAL INFORMATION ON CONSTRUCTION ZONE PAVEMENT MARKINGS.

FOR DRUM AND CHANNELIZING CONE SPACING USE:
SHIFT TAPER 50' TANGENT 100'
MERGE TAPER 50'

SH-94 TEXAS COUNTY

TEMPORARY TRAFFIC CONTROL PHASE 3 SHEET 1 OF 2

JOB PIECE NO. 33323(04) SHEET NO. T008

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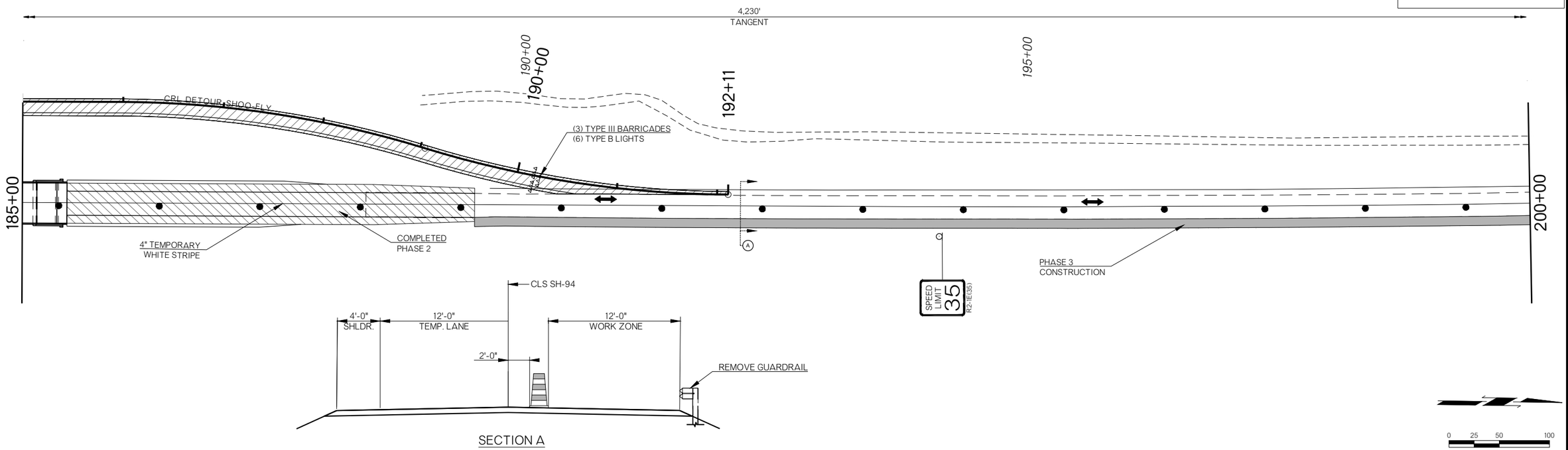
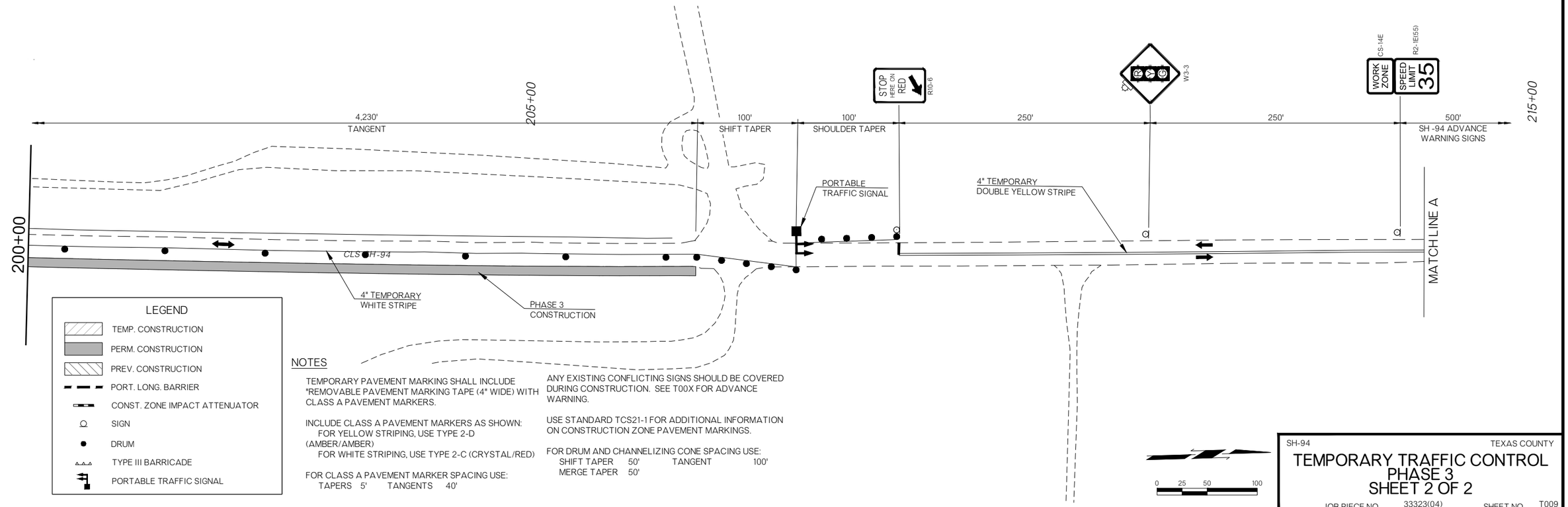
CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE





NOTES

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FOR DRUM AND CHANNELIZING CONE SPACING USE:
SHIFT TAPER 50' TANGENT 100'
MERGE TAPER 50'

SH-94 TEXAS COUNTY

TEMPORARY TRAFFIC CONTROL PHASE 3 SHEET 2 OF 2

JOB PIECE NO. 33323(04) SHEET NO. T009

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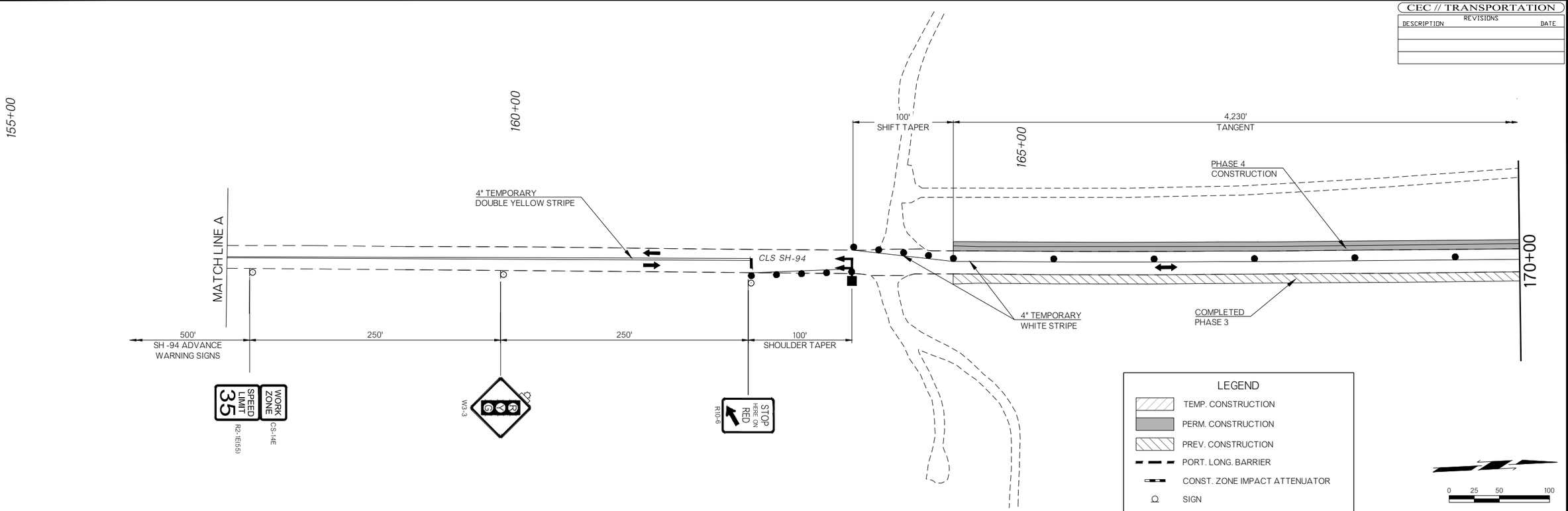
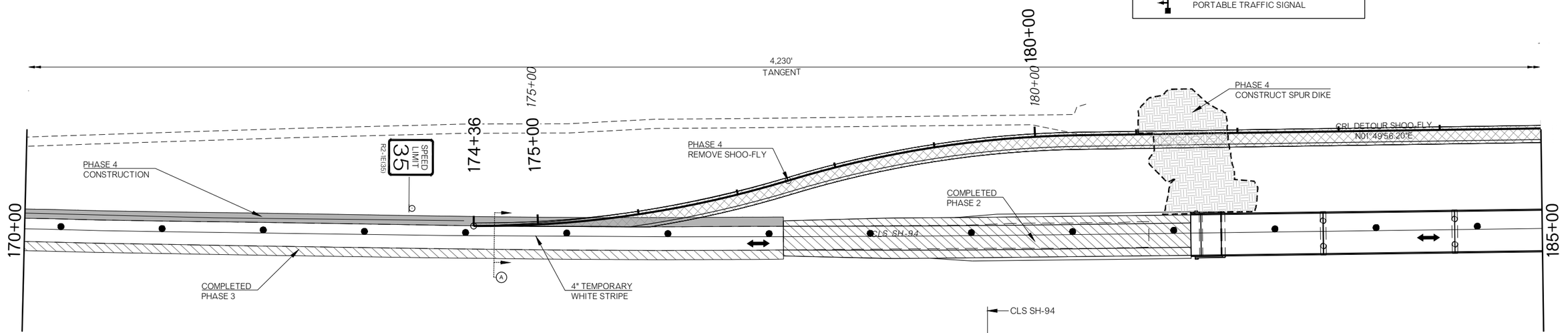
CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE





NOTES

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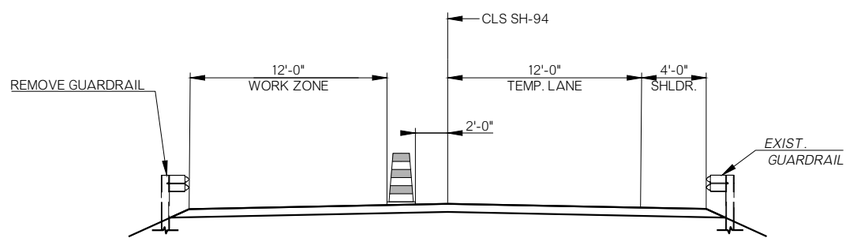
MERGE TAPER 50'



SECTION A

SH-94 TEXAS COUNTY

TEMPORARY TRAFFIC CONTROL PHASE 4 SHEET 1 OF 2

JOB PIECE NO. 33323(04) SHEET NO. T010

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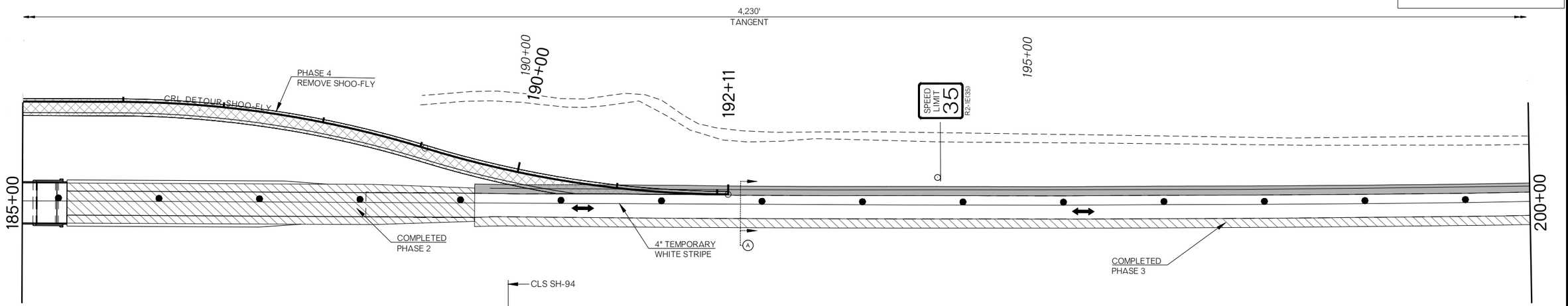
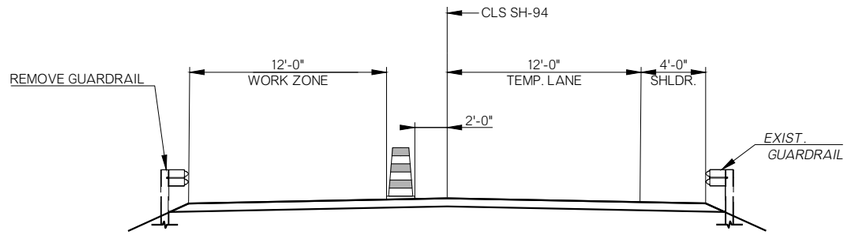
CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE





SECTION A

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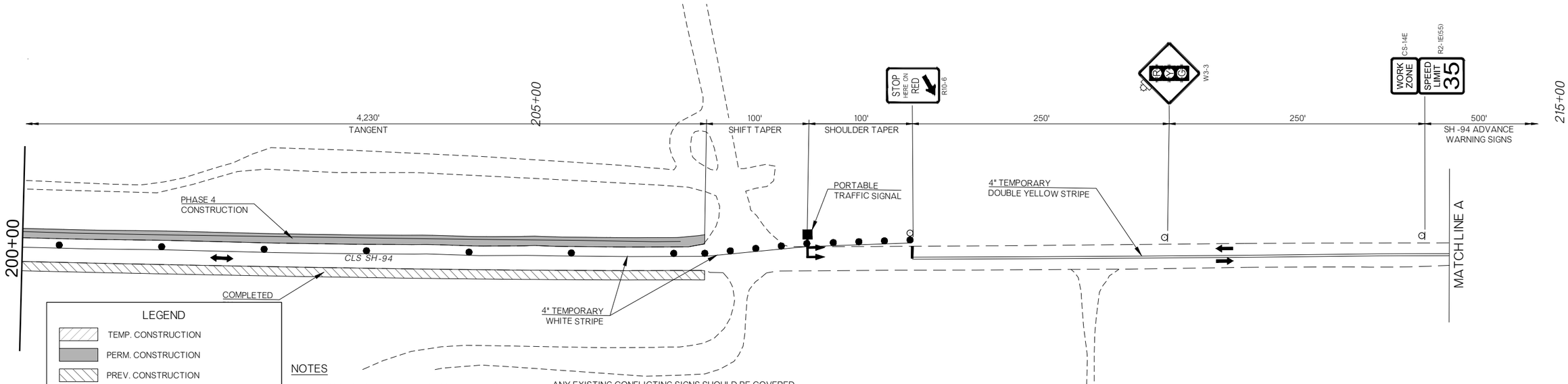

LEGEND

- TEMP. CONSTRUCTION
- PERM. CONSTRUCTION
- PREV. CONSTRUCTION
- PORT. LONG. BARRIER
- CONST. ZONE IMPACT ATTENUATOR
- SIGN
- DRUM
- TYPE III BARRICADE
- PORTABLE TRAFFIC SIGNAL

NOTES

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FOR DRUM AND CHANNELIZING CONE SPACING USE:
SHIFT TAPER 50' TANGENT 100'
MERGE TAPER 50'

0 25 50 100

SH-94 TEXAS COUNTY

TEMPORARY TRAFFIC CONTROL PHASE 4 SHEET 2 OF 2

JOB PIECE NO. 33323(04) SHEET NO. T011

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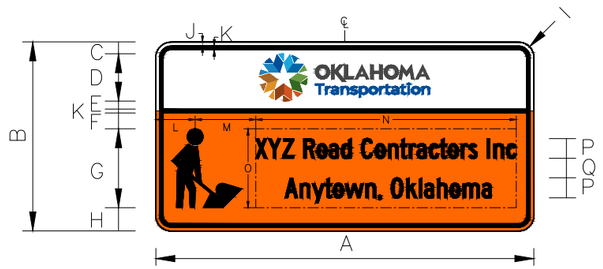
CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE

CS–CONTRACTOR 1

OKLAHOMA LOGO IS CENTERED VERTICALLY ON PANEL
OKLAHOMA LOGO SIZE PROPORTIONAL BASED ON DIAMETER OF CIRCLE
CONTRACTOR NAME AND LOCATION ARE VARIABLE, TEXT IS TO BE PLACED WITHIN THE DASHED AREA
FONT SIZE AND SPACING MUST BE AT LEAST THE MINIMUM LISTED



*SEE PAGE 6–59 OF THE 2004 STANDARD
HIGHWAY SIGNS MANUAL FOR SYMBOL DESIGN

ALL DIMENSIONS IN INCHES

A	B	C	D	E	F	G	H	I	J	K
48	24	1.75	6	0.75	2	10	3	1.5	0.5	0.5
72	36	2.63	9	1.12	3	15	4.5	1.5	.75	.75
96	48	2.63	12	1.5	4	20	6	1.5	1	1

L	M	N	O	P MINIMUM	Q MINIMUM
5	7	33	10	2.5C	2.5
7.6	10.5	49.5	15	3.75C	3.75
10.1	14	66	20	5C	5

		UPPER SECTION	LOWER SECTION
COLORS:	LEGEND, BORDER	– BLACK	BLACK
	BACKGROUND	– WHITE (RETROREFLECTIVE)	ORANGE (RETROREFLECTIVE)

CS–CONTRACTOR 2&3

TEXT LENGTH IS VARIABLE, STRING IS CENTERED VERTICALLY ON PANEL
COMPLETION SIGN TEXT CAN READ EITHER "SPRING", "SUMMER", "FALL", OR "WINTER"
ALTERNATIVELY MONTH NAMES MAY BE USED AND ABBREVIATED IF NECESSARY
ONE OF THE FOLLOWING SIGNS SHOULD BE PLACED BELOW THE CONTRACTOR SIGN

ALL DIMENSIONS IN INCHES

A	B	C	D	E	F	G	H
48	12	4.5	3C	3B	1.5	0.5	0.5
72	18	6.75	4.5C	4.5B	1.5	0.75	0.75
96	24	9	6C	6B	1.5	1	1

COLORS: LEGEND, BORDER – BLACK
BACKGROUND – ORANGE (RETROREFLECTIVE)

OKLAHOMA TRANSPORTATION LOGO

DIMENSIONS ARE ALL APPROXIMATE
COLORS ARE LISTED AS RGB AND PANTONE VALUES
DESIGN GUIDELINES AND IMAGES MAY BE FOUND AT _____

A	B	C	D
6	21.4	1.8	1.3
9	32.1	2.7	2
12	42.8	3.6	2.7

12

9 OR 10
(10 IS PREFERRED)

1	2	3	4	5	6	7	8	9	10	11	12
SKY BLUE BRIGHT	SKY BLUE DARK	WOODLAND GREEN BRIGHT	WOODLAND GREEN DARK	CLAY RED BRIGHT	CLAY RED DARK	PRARIE GOLD BRIGHT	PRARIE GOLD DARK	WATER BLUE BRIGHT	WATER BLUE DARK	SLATE GREY BRIGHT	SLATE GREY DARK
R28 G166 B223 #1CA6DF	R0 G102 B166 #0066A6	R102 G155 B65 #669B41	R50 G104 B32 #326820	R209 G84 B32 #D15420	R145 G65 B21 #914115	R222 G144 B39 #DE9027	R169 G103 B40 #A96728	R24 G123 B192 #187BC0	R0 G78 B154 #004E9A	R120 G120 B120 #787878	R70 G70 B70 #464646
2171	2384	7490	2280	7580	7587	131	132	660	7686	COOL GRAY 8	COOL GRAY 10

SH-94 TEXAS COUNTY

CONTRACTOR SIGN DETAIL

JOB PIECE NO. 33323(04) SHEET NO. T012

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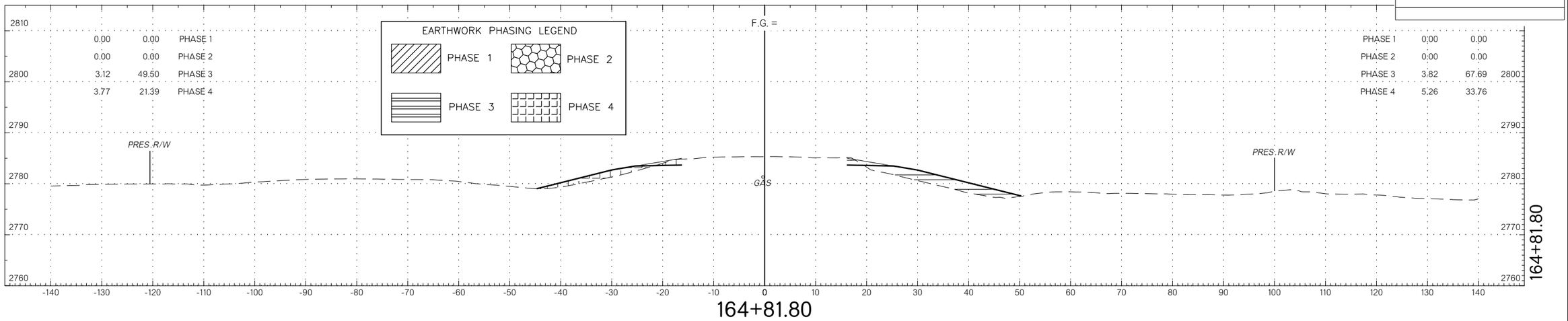
CEC // TRANSPORTATION

REVISIONS	
DESCRIPTION	DATE

AREA
EXC. EMB.

VOLUME
EXC. EMB.

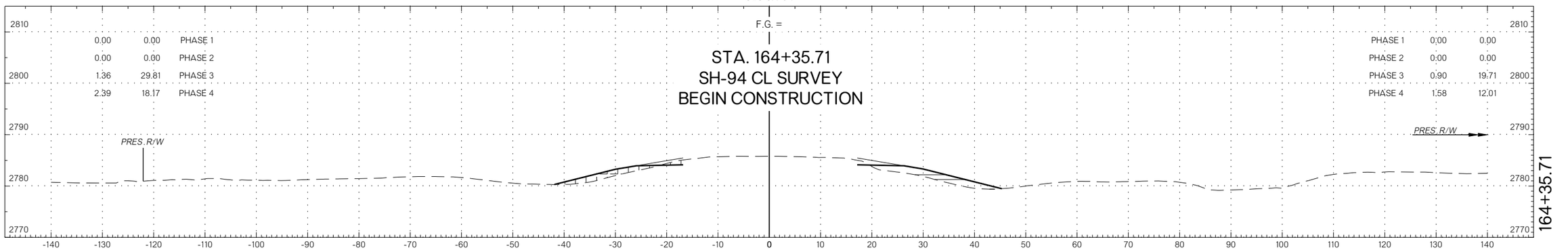
CLS SH-94



164+81.80

164+81.80

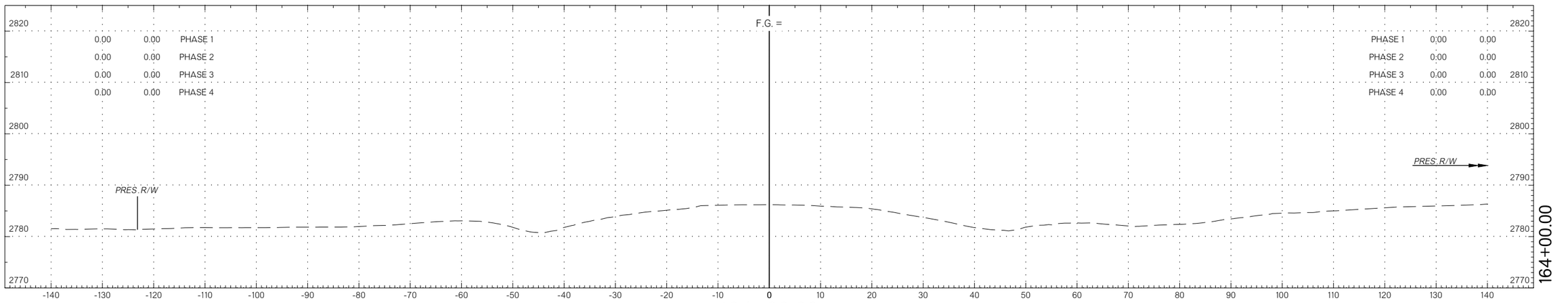
CLS SH-94



164+35.71

164+35.71

CLS SH-94



164+00.00

164+00.00

CLS SH-94

AREA

	EXC.	EMB.
PHASE 1	0.00	0.00
PHASE 2	0.00	0.00
PHASE 3	1.30	84.33
PHASE 4	1.15	69.69

VOLUME

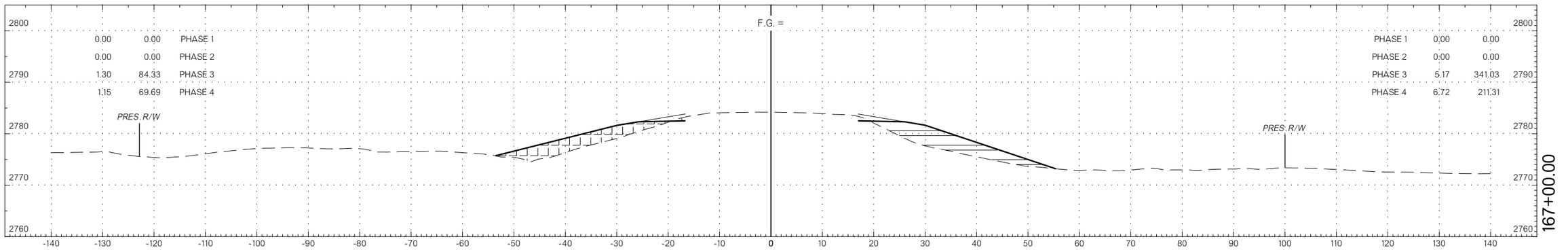
	EXC.	EMB.
PHASE 1	0.00	0.00
PHASE 2	0.00	0.00
PHASE 3	5.17	341.03
PHASE 4	6.72	211.31

CEC // TRANSPORTATION

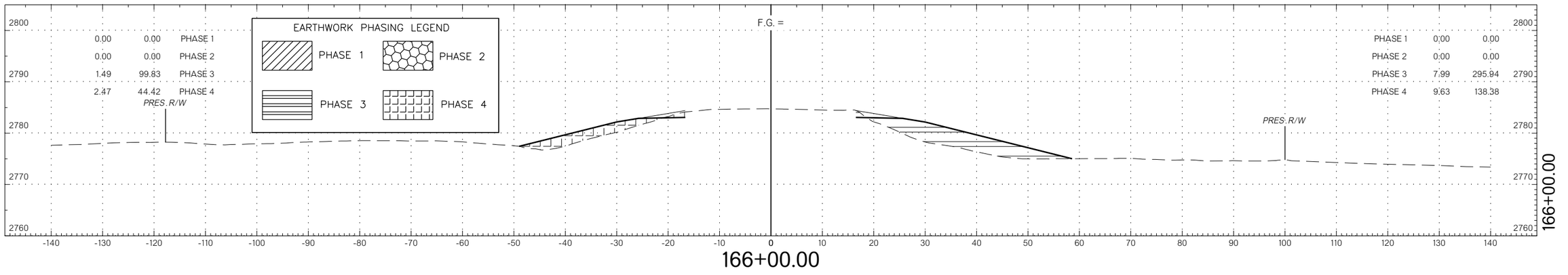
REVISIONS

DESCRIPTION	DATE

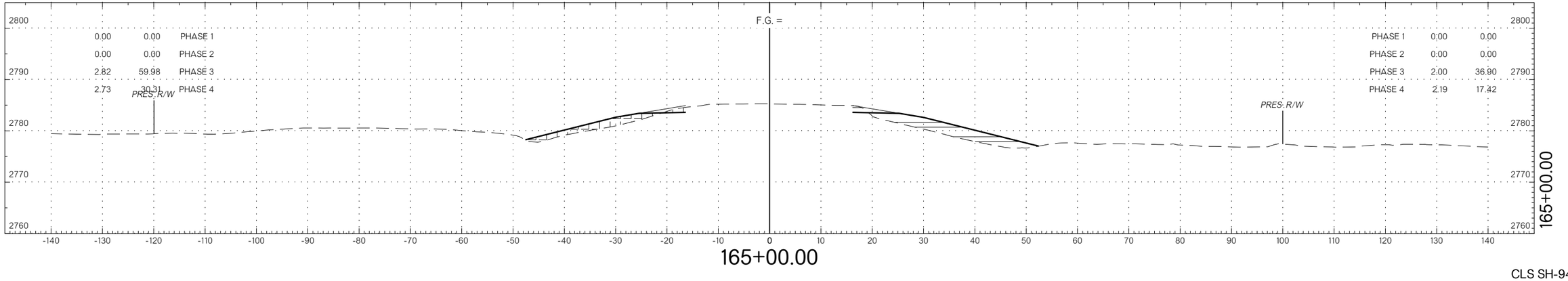
CLS SH-94



CLS SH-94



CLS SH-94



CLS SH-94

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COUNTY TEXAS HIGHWAY SH-94 JOB PIECE NO. 33323(04) SHEET NO. X002

AREA

	EXC.	EMB.
PHASE 1	0.00	0.00
PHASE 2	0.00	0.00
PHASE 3	3.06	120.77
PHASE 4	2.23	94.46

VOLUME

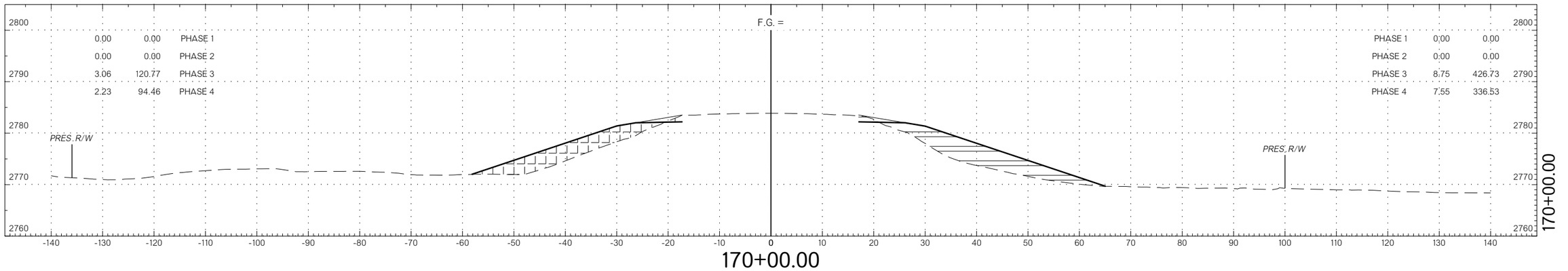
	EXC.	EMB.
PHASE 1	0.00	0.00
PHASE 2	0.00	0.00
PHASE 3	8.75	426.73
PHASE 4	7.55	336.53

CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE

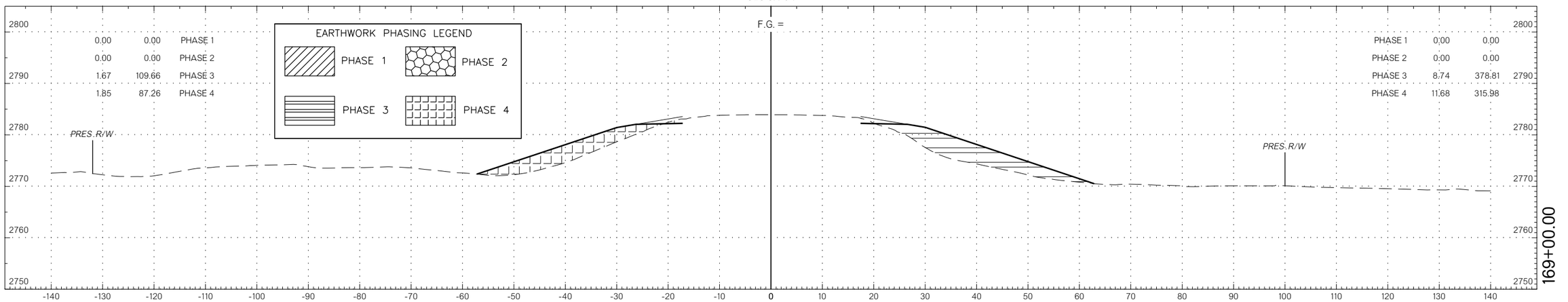
CLS SH-94



170+00.00

170+00.00

CLS SH-94



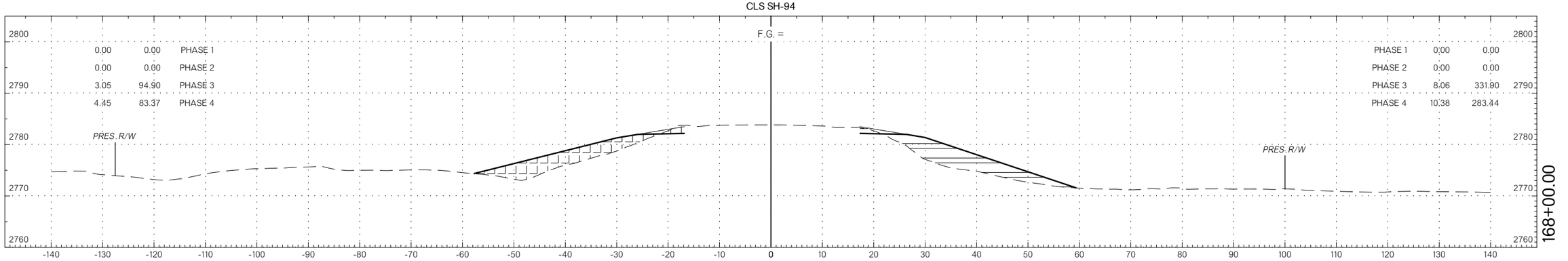
	EXC.	EMB.
PHASE 1	0.00	0.00
PHASE 2	0.00	0.00
PHASE 3	1.67	109.66
PHASE 4	1.85	87.26

	EXC.	EMB.
PHASE 1	0.00	0.00
PHASE 2	0.00	0.00
PHASE 3	8.74	378.81
PHASE 4	11.68	315.98

169+00.00

169+00.00

CLS SH-94



	EXC.	EMB.
PHASE 1	0.00	0.00
PHASE 2	0.00	0.00
PHASE 3	3.05	94.90
PHASE 4	4.45	83.37

	EXC.	EMB.
PHASE 1	0.00	0.00
PHASE 2	0.00	0.00
PHASE 3	8.06	331.90
PHASE 4	10.38	283.44

168+00.00

168+00.00

CLS SH-94

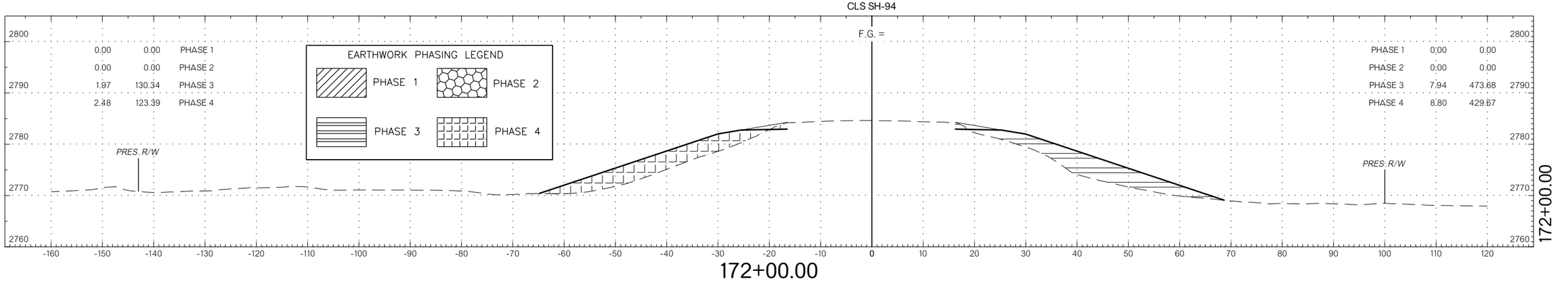
AREA
EXC. EMB.

VOLUME
EXC. EMB.

CEC // TRANSPORTATION

REVISIONS	
DESCRIPTION	DATE

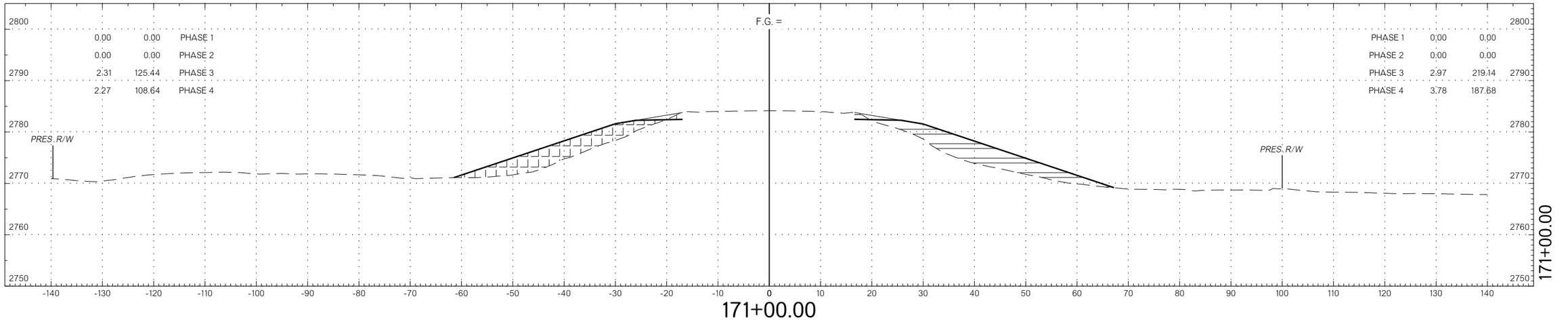
CLS SH-94



172+00.00

172+00.00

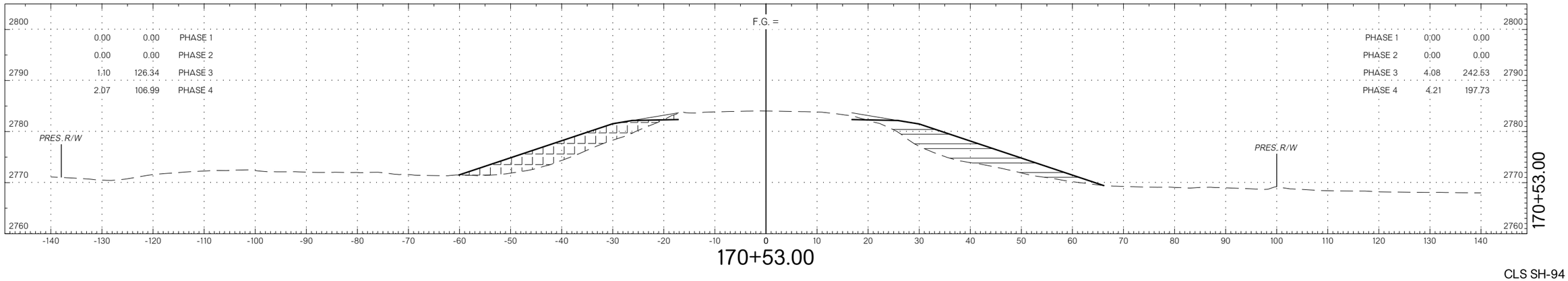
CLS SH-94



171+00.00

171+00.00

CLS SH-94



170+53.00

170+53.00

CLS SH-94

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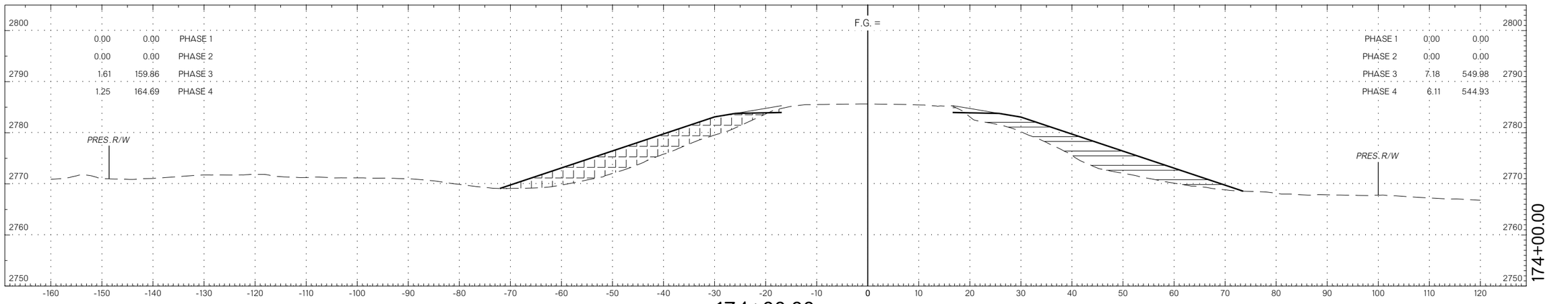
AREA
EXC. EMB.

VOLUME
EXC. EMB.

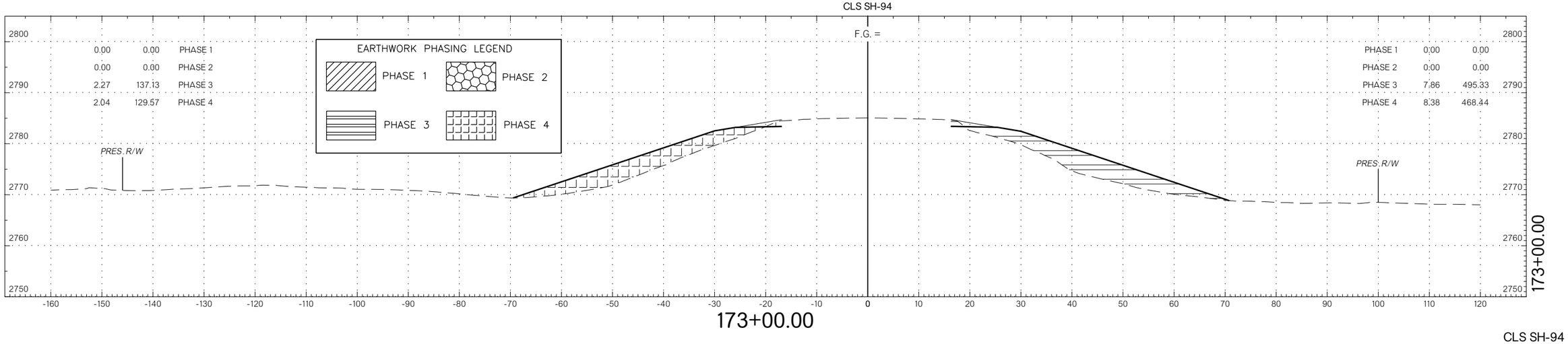
CEC // TRANSPORTATION

REVISIONS	
DESCRIPTION	DATE

CLS SH-94



CLS SH-94



CLS SH-94

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COUNTY TEXAS HIGHWAY SH-94 JOB PIECE NO. 33323(04) SHEET NO. X005

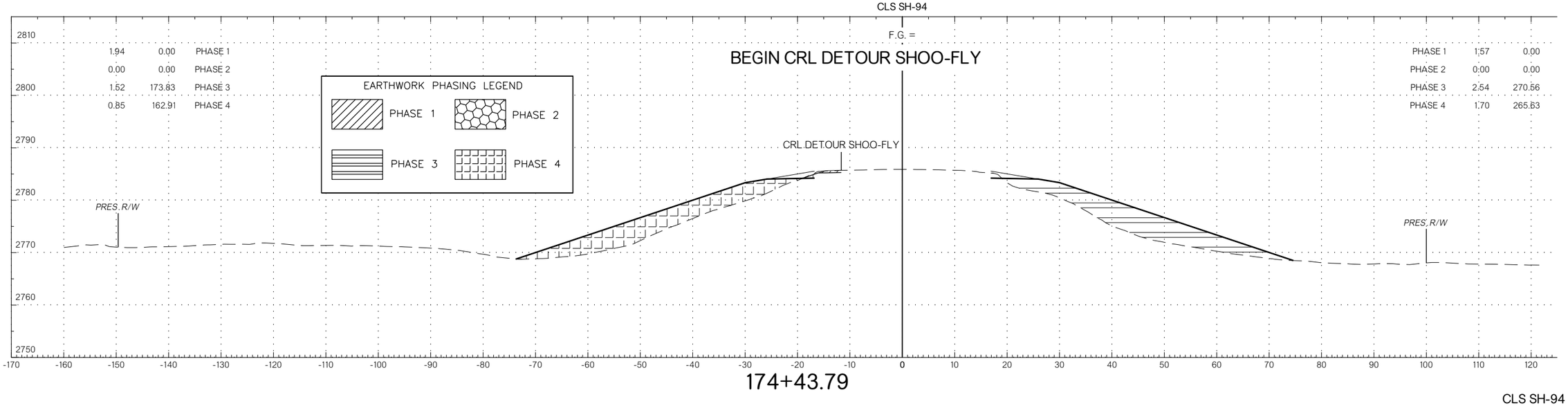
AREA			VOLUME	
	EXC.	EMB.	EXC.	EMB.
PHASE 1	1.94	0.00	1.57	0.00
PHASE 2	0.00	0.00	0.00	0.00
PHASE 3	1.52	173.83	2.54	270.56
PHASE 4	0.85	162.91	1.70	265.83

CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE

CLS SH-94



174+43.79

CLS SH-94

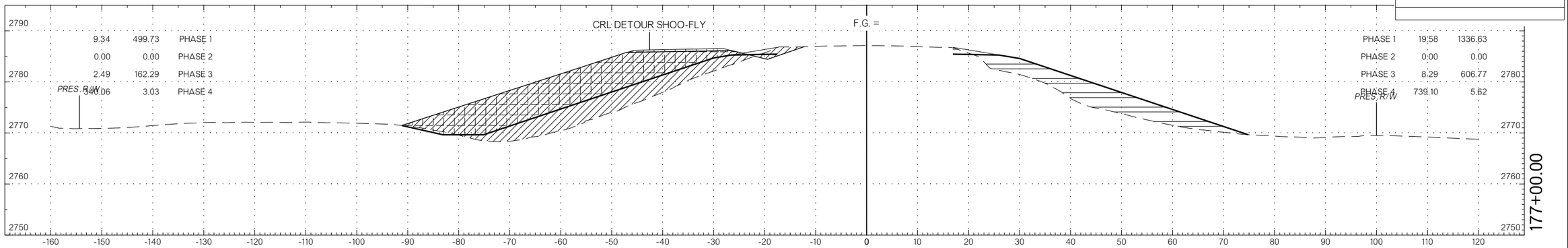
CEC // TRANSPORTATION

REVISIONS	
DESCRIPTION	DATE

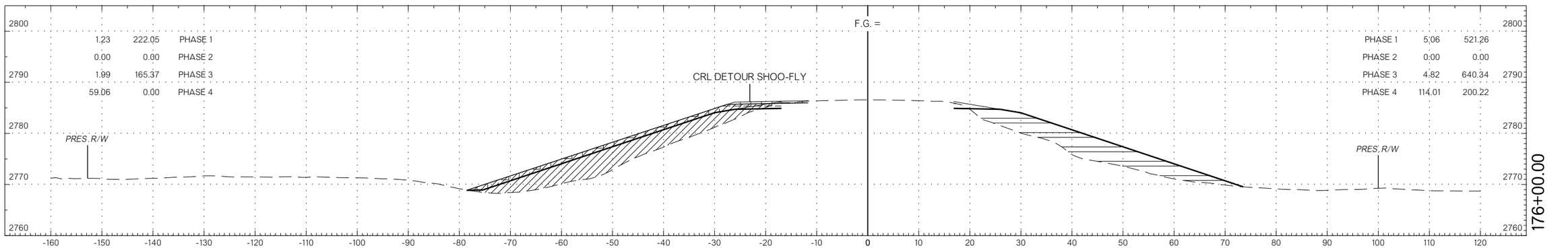
AREA
EXC. EMB.

VOLUME
EXC. EMB.

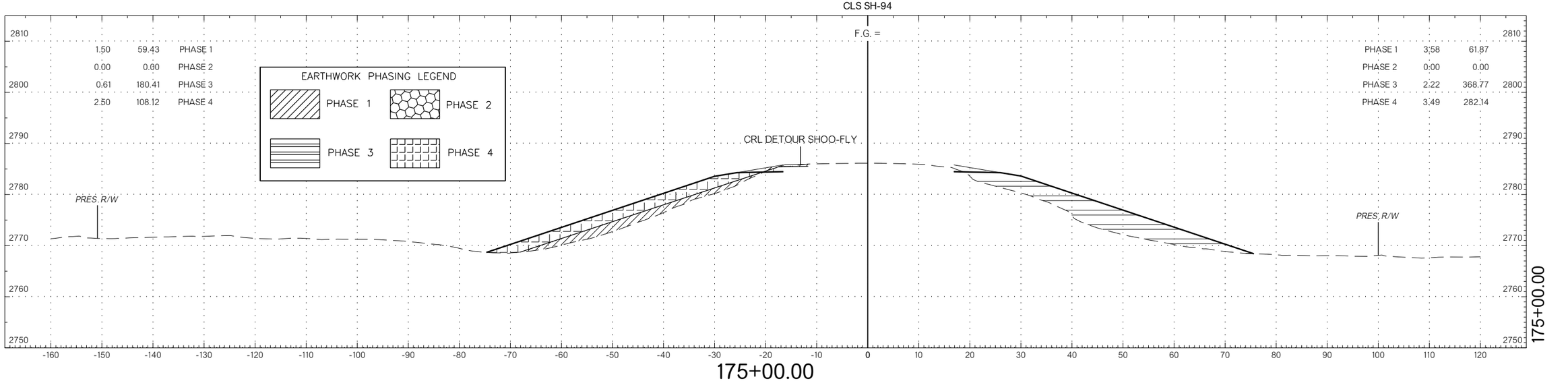
CLS SH-94



CLS SH-94



CLS SH-94



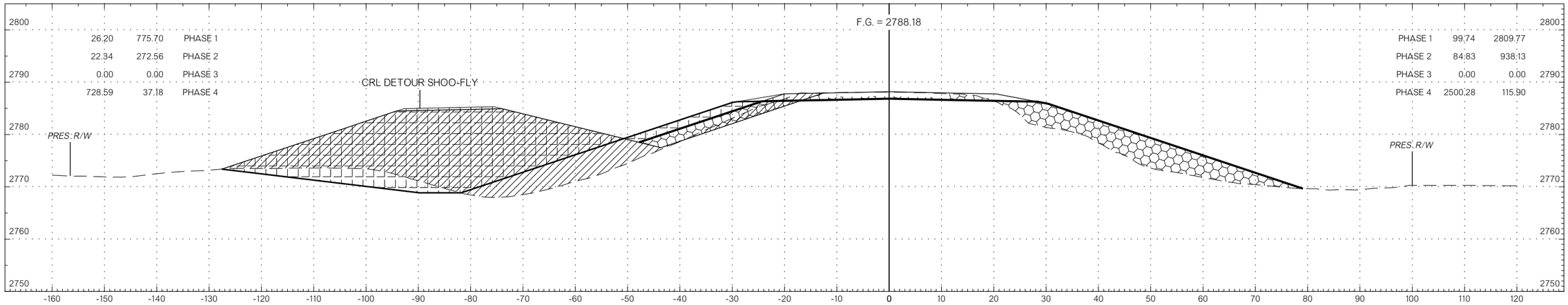
CLS SH-94

AREA		VOLUME	
EXC.	EMB.	EXC.	EMB.

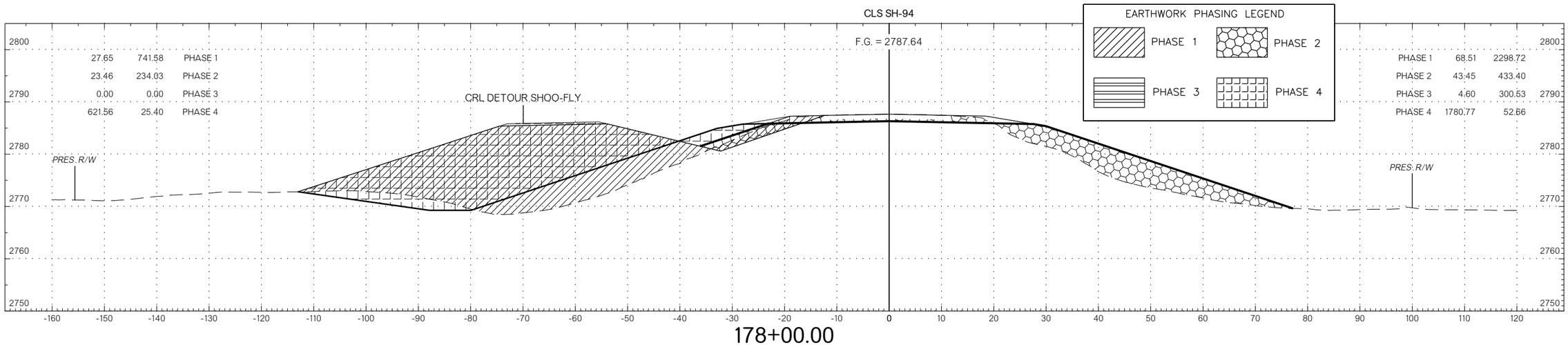
CEC // TRANSPORTATION

REVISIONS	
DESCRIPTION	DATE

CLS SH-94



CLS SH-94



CLS SH-94

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COUNTY	TEXAS	HIGHWAY	SH-94	JOB PIECE NO.	33323(04)	SHEET NO.	X008

AREA

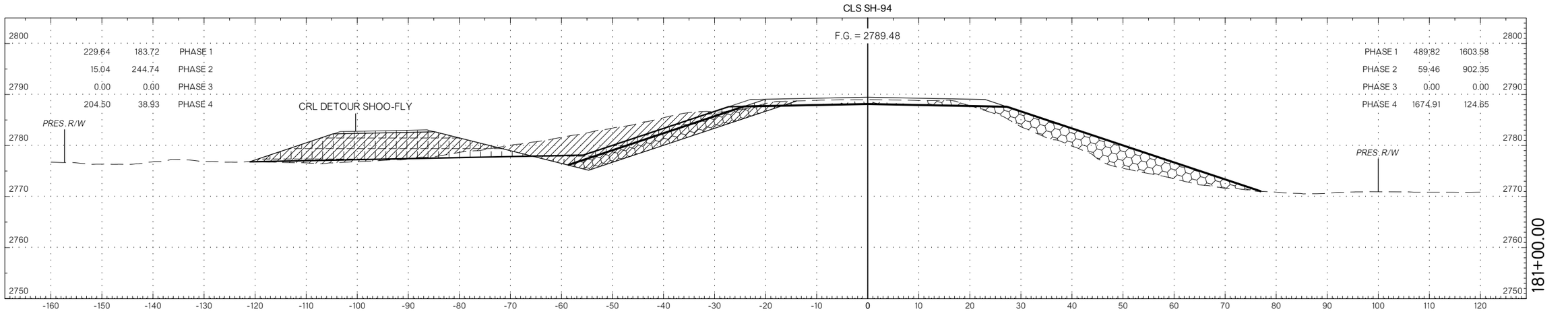
EXC.	EMB.
229.64	183.72 PHASE 1
15.04	244.74 PHASE 2
0.00	0.00 PHASE 3
204.50	38.93 PHASE 4

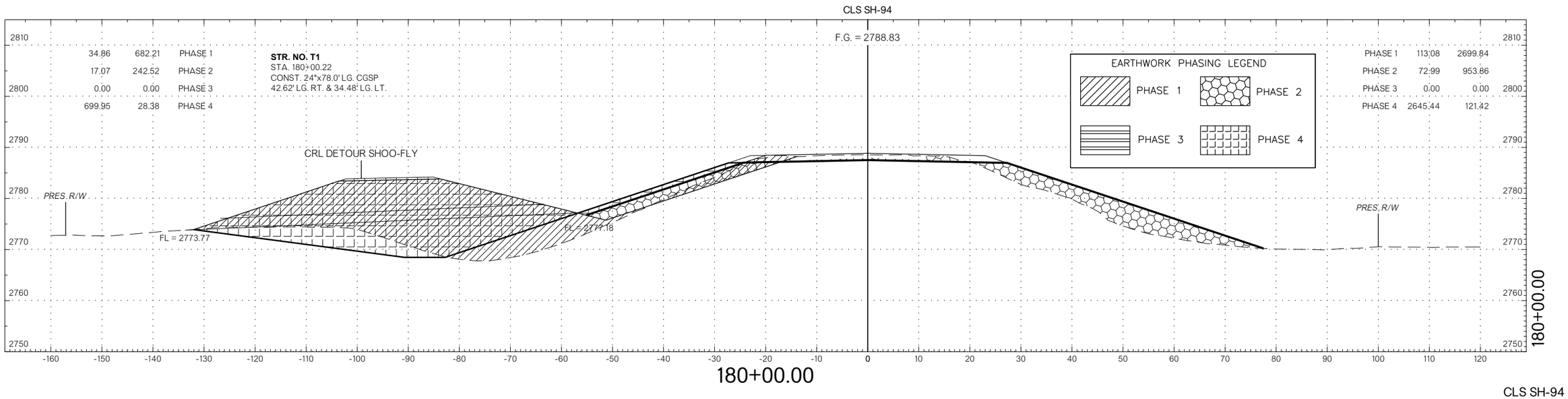
VOLUME

EXC.	EMB.
PHASE 1	489.82 1603.58
PHASE 2	59.46 902.35
PHASE 3	0.00 0.00
PHASE 4	1674.91 124.65

CEC // TRANSPORTATION

REVISIONS	
DESCRIPTION	DATE





CLS SH-94

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Save date: 11/21/2023, LUKE CHALFANT, Plot date: 11/21/2023, MARCO PARRA, AutoCAD PDF (General Documentation).pc3

CEC // TRANSPORTATION

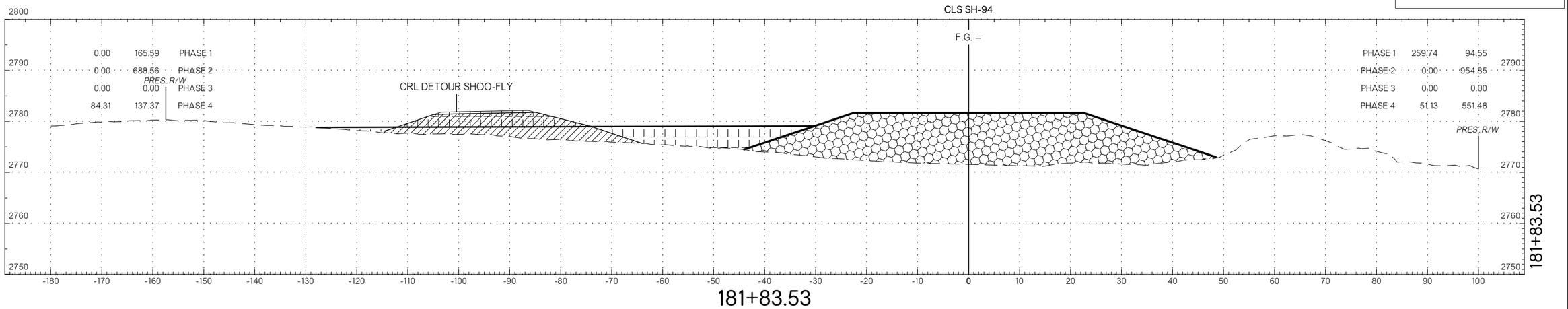
REVISIONS	
DESCRIPTION	DATE

AREA

	EXC.	EMB.
PHASE 1	0.00	165.59
PHASE 2	0.00	688.56
PHASE 3	0.00	0.00
PHASE 4	84.31	137.37

VOLUME

	EXC.	EMB.
PHASE 1	259.74	94.55
PHASE 2	0.00	954.85
PHASE 3	0.00	0.00
PHASE 4	51.13	551.48



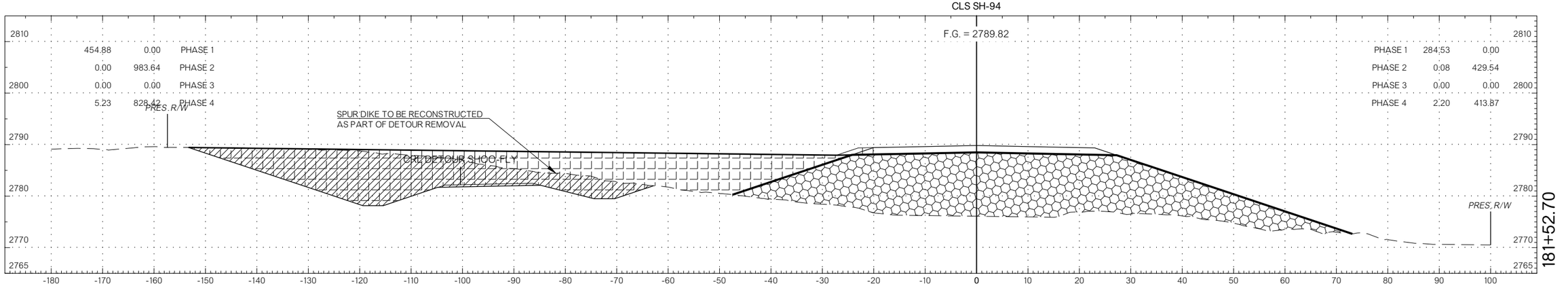
181+83.53

AREA

	EXC.	EMB.
PHASE 1	454.88	0.00
PHASE 2	0.00	983.64
PHASE 3	0.00	0.00
PHASE 4	5.23	828.42

VOLUME

	EXC.	EMB.
PHASE 1	284.53	0.00
PHASE 2	0.08	429.54
PHASE 3	0.00	0.00
PHASE 4	2.20	413.87



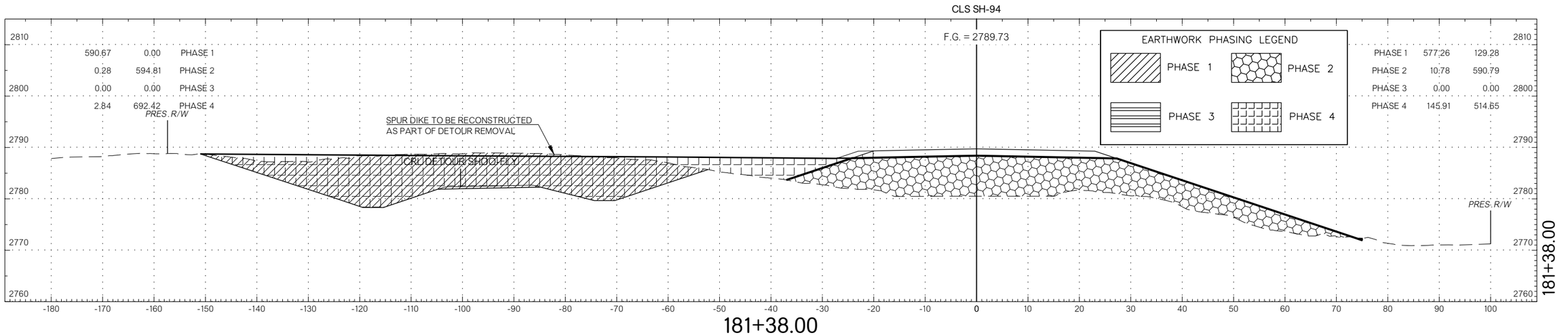
181+52.70

AREA

	EXC.	EMB.
PHASE 1	590.67	0.00
PHASE 2	0.28	594.81
PHASE 3	0.00	0.00
PHASE 4	2.84	692.42

VOLUME

	EXC.	EMB.
PHASE 1	577.26	129.28
PHASE 2	10.78	590.79
PHASE 3	0.00	0.00
PHASE 4	145.91	514.65



181+38.00

CLS SH-94

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COUNTY TEXAS HIGHWAY SH-94 JOB PIECE NO. 33323(04) SHEET NO. X010

CEC // TRANSPORTATION

REVISIONS	
DESCRIPTION	DATE

AREA

	EXC.	EMB.	
PHASE 1	0.00	1068.75	
PHASE 2	0.00	0.00	
PHASE 3	0.00	0.00	
PHASE 4	1076.27	0.00	

VOLUME

	EXC.	EMB.	
PHASE 1	0.00	2190.01	
PHASE 2	0.00	0.00	
PHASE 3	0.00	0.00	
PHASE 4	2205.60	0.00	

CLS SH-94

F.G. =

CRL DETOUR SHOO-FLY

PRES. R/W

PRES. R/W

2800 2790 2780 2770 2760 2750

-180 -170 -160 -150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100

183+00.00

183+00.00

CLS SH-94

AREA

	EXC.	EMB.	
PHASE 1	0.00	1044.94	
PHASE 2	0.00	0.00	
PHASE 3	0.00	0.00	
PHASE 4	1052.46	0.00	

VOLUME

	EXC.	EMB.	
PHASE 1	0.00	1034.94	
PHASE 2	0.00	301.59	
PHASE 3	0.00	0.00	
PHASE 4	1155.24	18.38	

EARTHWORK PHASING LEGEND

PHASE 1 PHASE 2

PHASE 3 PHASE 4

F.G. =

CRL DETOUR SHOO-FLY

PRES. R/W

PRES. R/W

2800 2790 2780 2770 2760 2750

-180 -170 -160 -150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100

182+44.05

182+44.05

CLS SH-94

AREA

	EXC.	EMB.	
PHASE 1	0.00	223.78	
PHASE 2	0.00	369.71	
PHASE 3	0.00	0.00	
PHASE 4	363.72	22.53	

VOLUME

	EXC.	EMB.	
PHASE 1	0.00	118.76	
PHASE 2	0.00	322.77	
PHASE 3	0.00	0.00	
PHASE 4	136.65	48.77	

F.G. =

CRL DETOUR SHOO-FLY

PRES. R/W

PRES. R/W

2800 2790 2780 2770 2760

-180 -170 -160 -150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100

182+00.00

182+00.00

CLS SH-94

AREA

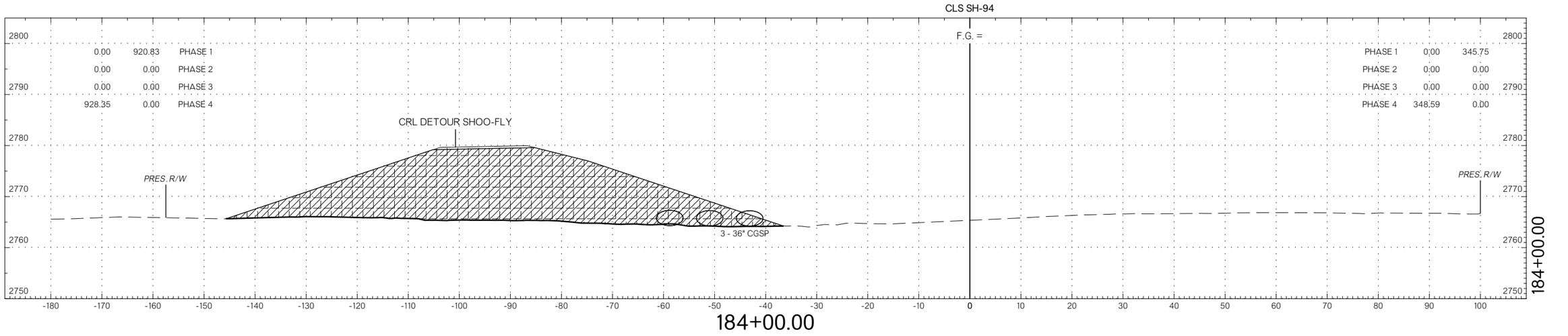
EXC.	EMB.

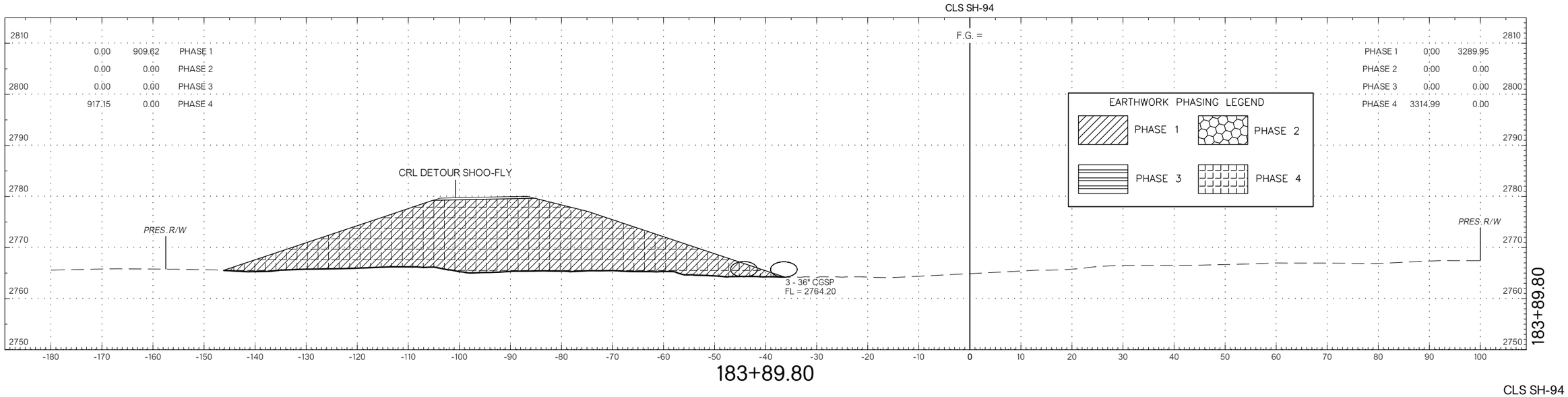
VOLUME

EXC.	EMB.

CEC // TRANSPORTATION

REVISIONS	
DESCRIPTION	DATE





CLS SH-94

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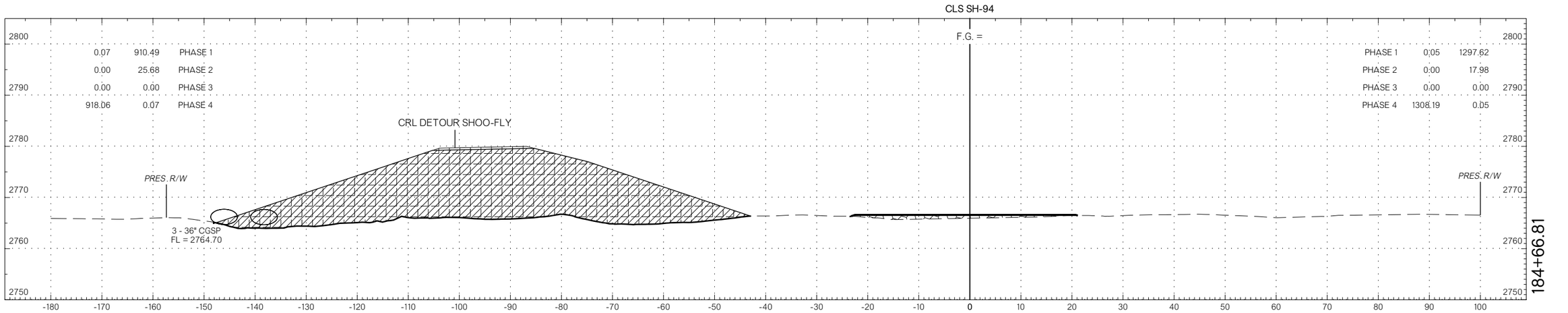
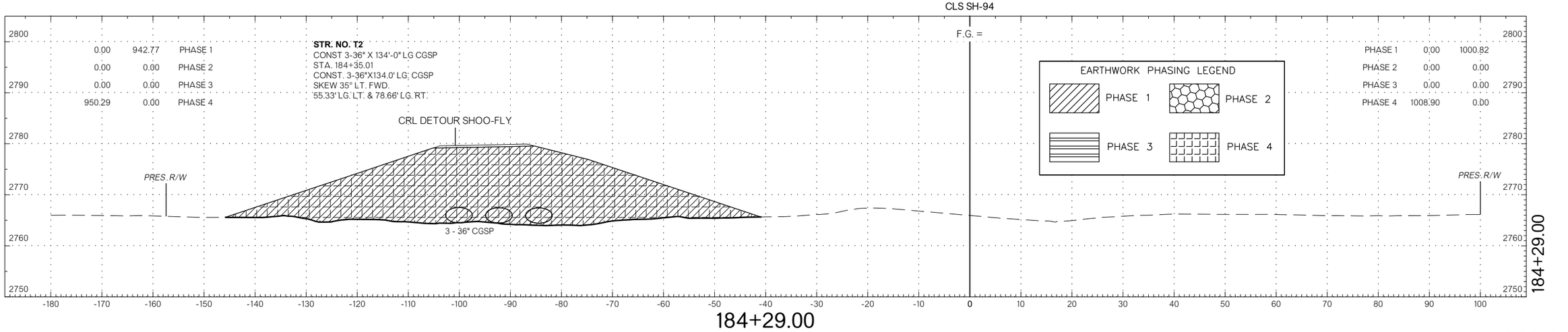
AREA		VOLUME	
EXC.	EMB.	EXC.	EMB.

CEC // TRANSPORTATION

REVISIONS	
DESCRIPTION	DATE





CLS SH-94

AREA

EXC.	EMB.	
0.00	918.54	PHASE 1
0.00	1409.67	PHASE 2
0.00	0.00	PHASE 3
807.69	0.00	PHASE 4

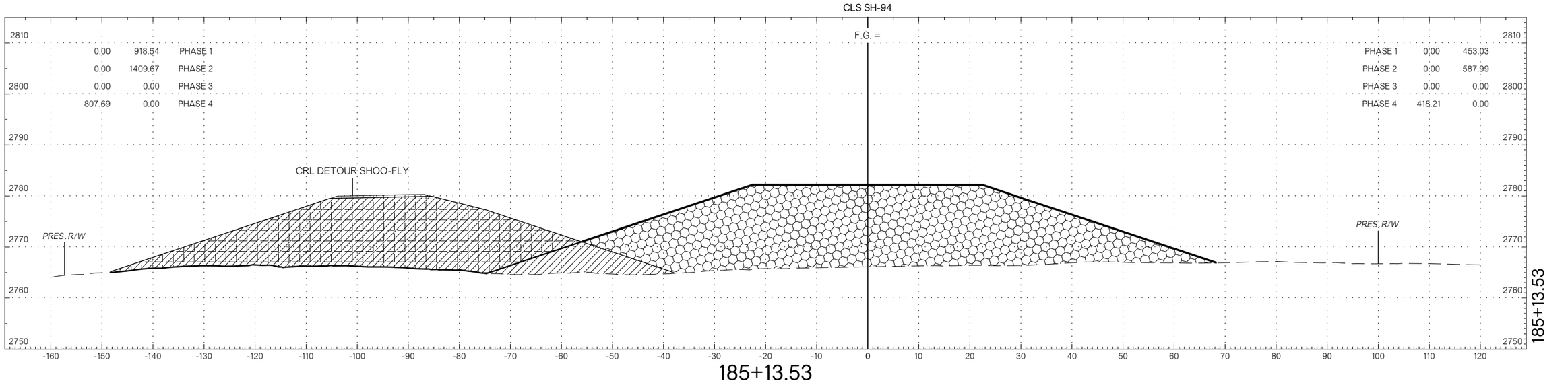
VOLUME

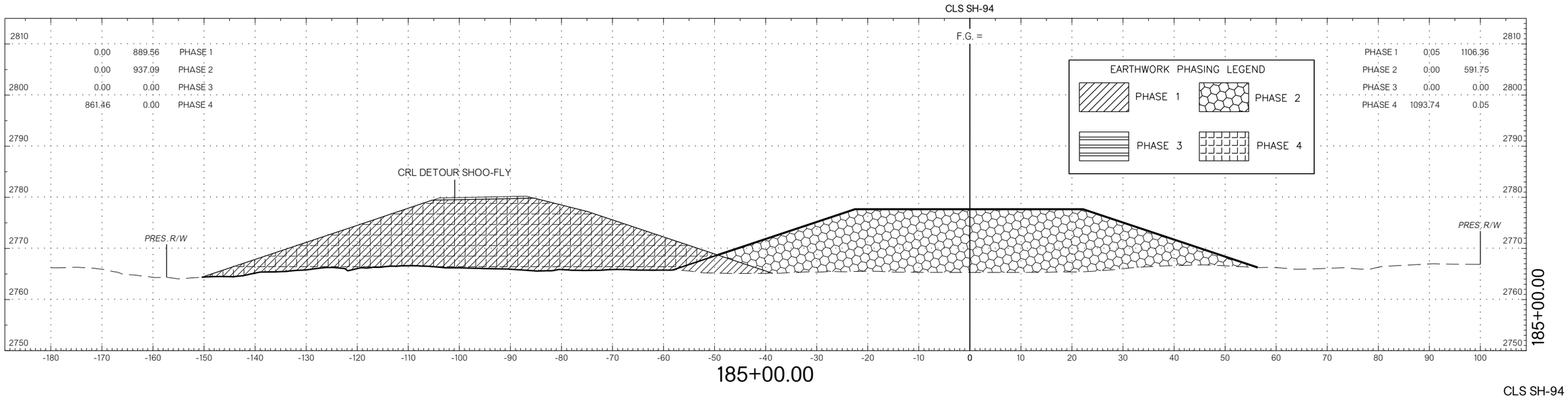
EXC.	EMB.	
PHASE 1	0.00	453.03
PHASE 2	0.00	587.99
PHASE 3	0.00	0.00
PHASE 4	418.21	0.00

CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE





CLS SH-94

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AREA

	EXC.	EMB.
PHASE 1	0.00	1060.10
PHASE 2	0.00	2446.50
PHASE 3	0.00	0.00
PHASE 4	809.07	36.90

VOLUME

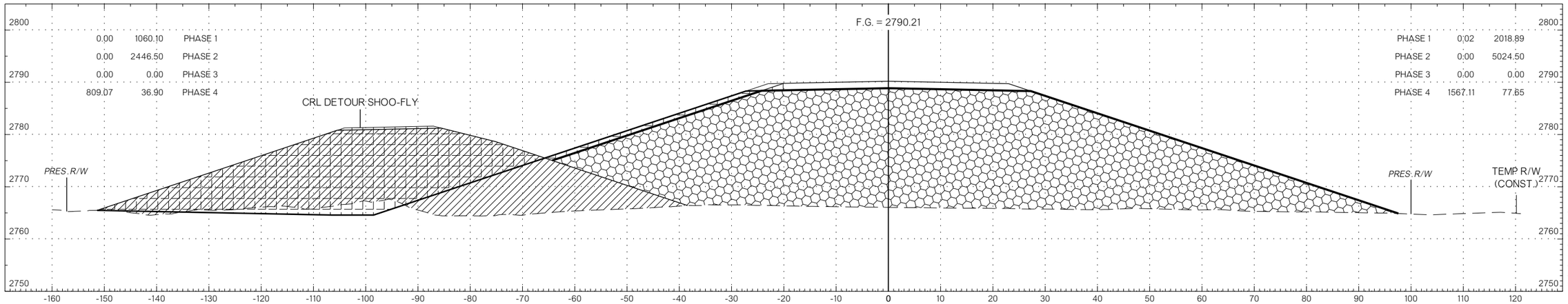
	EXC.	EMB.
PHASE 1	0.02	2018.89
PHASE 2	0.00	5024.50
PHASE 3	0.00	0.00
PHASE 4	1567.11	77.65

CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE

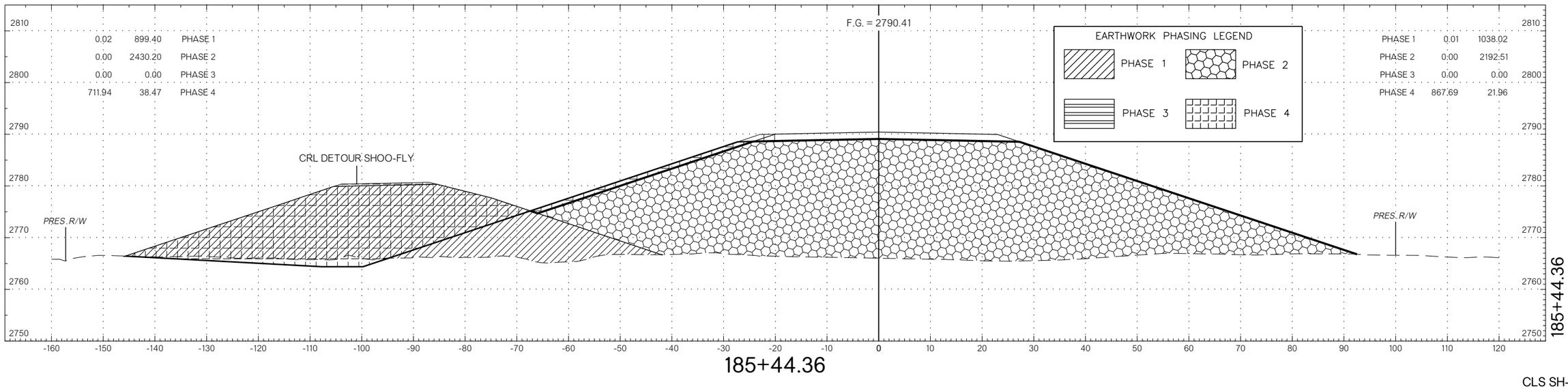
CLS SH-94



186+00.00

186+00.00

CLS SH-94



	EXC.	EMB.
PHASE 1	0.02	899.40
PHASE 2	0.00	2430.20
PHASE 3	0.00	0.00
PHASE 4	711.94	38.47

	EXC.	EMB.
PHASE 1	0.01	1038.02
PHASE 2	0.00	2192.51
PHASE 3	0.00	0.00
PHASE 4	867.69	21.96

185+44.36

185+44.36

CLS SH-94

AREA

EXC.	EMB.

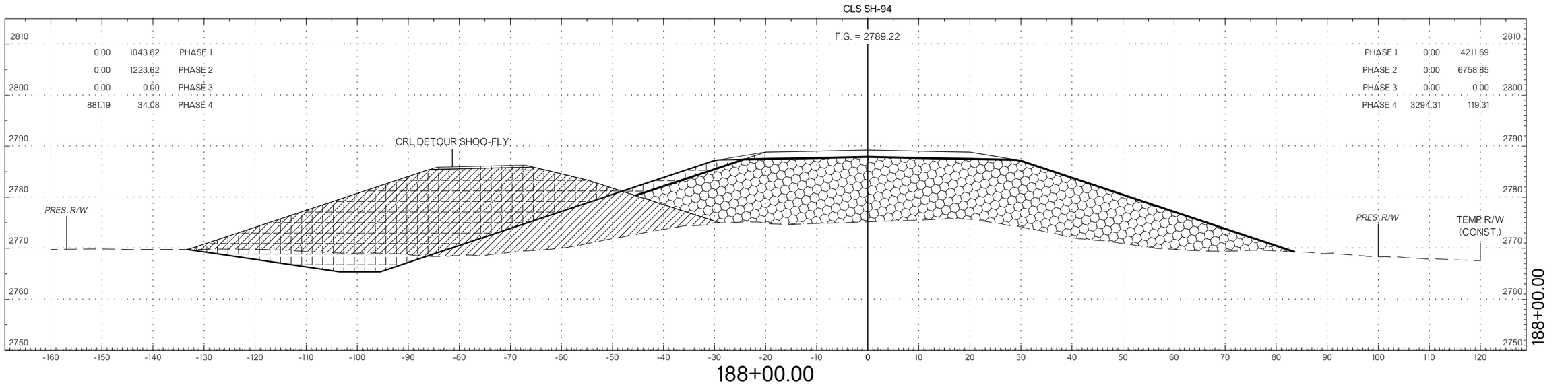
VOLUME

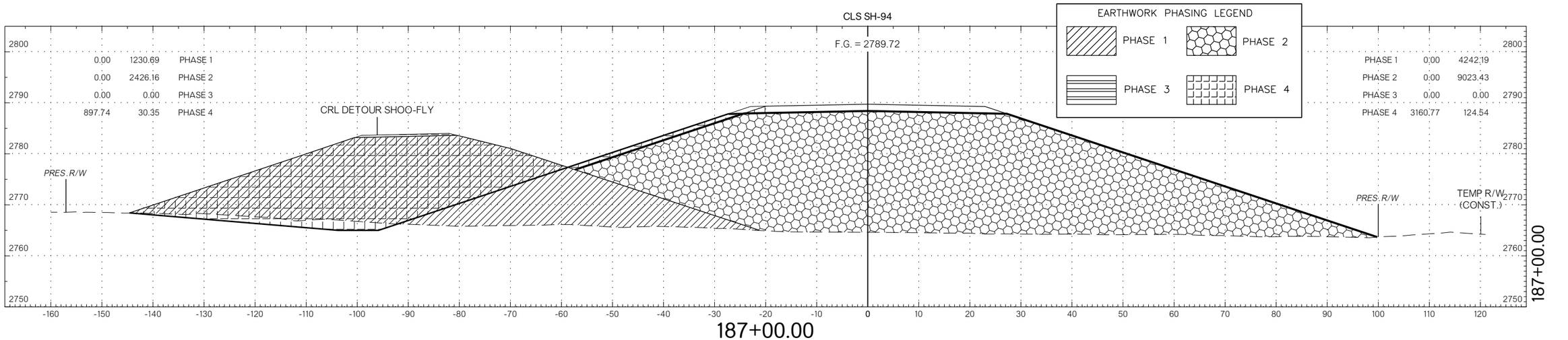
EXC.	EMB.

CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE





CLS SH-94

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COUNTY	TEXAS	HIGHWAY	SH-94	JOB PIECE NO.	33323(04)	SHEET NO.	X016

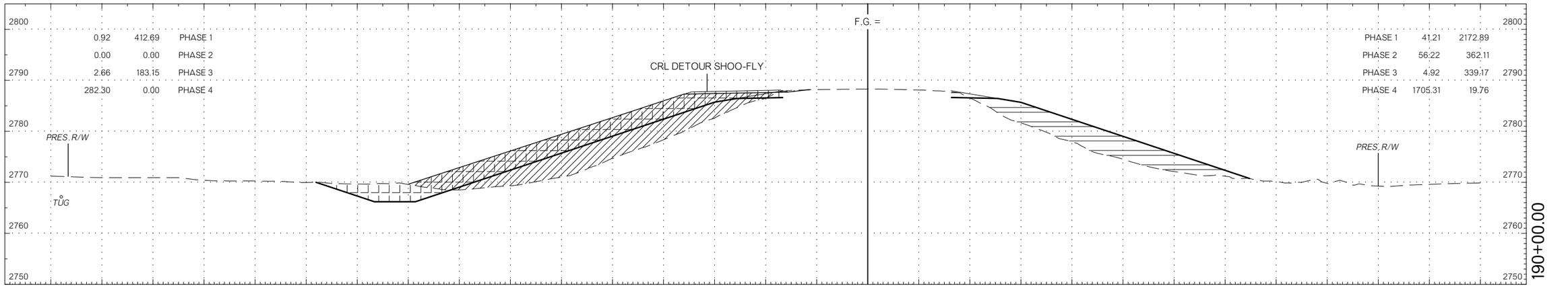
AREA
EXC. EMB.

VOLUME
EXC. EMB.

CEC // TRANSPORTATION

REVISIONS		
DESCRIPTION		DATE

CLS SH-94



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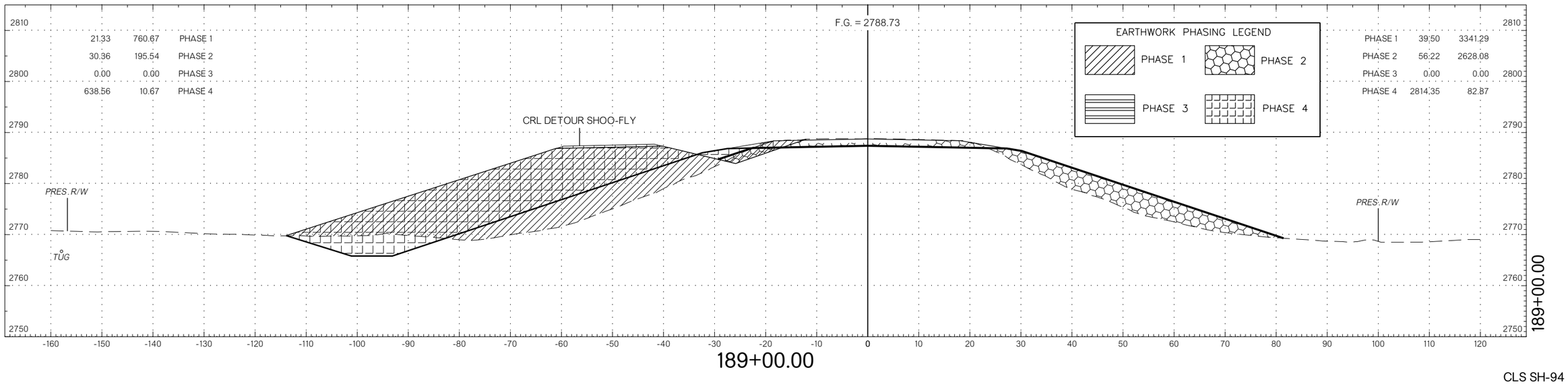

CLS SH-94

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AREA

EXC.	EMB.	
0.89	0.15	PHASE 1
0.00	0.00	PHASE 2
1.62	149.50	PHASE 3
69.43	191.47	PHASE 4

VOLUME

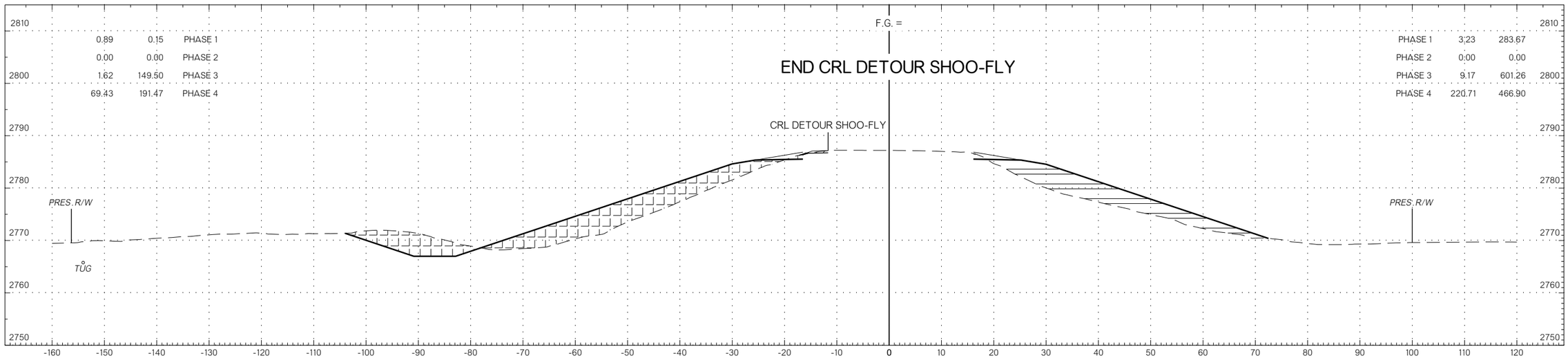
EXC.	EMB.	
PHASE 1	3.23	283.67
PHASE 2	0.00	0.00
PHASE 3	9.17	601.26
PHASE 4	220.71	466.90

CEC // TRANSPORTATION

REVISIONS

DESCRIPTION	DATE

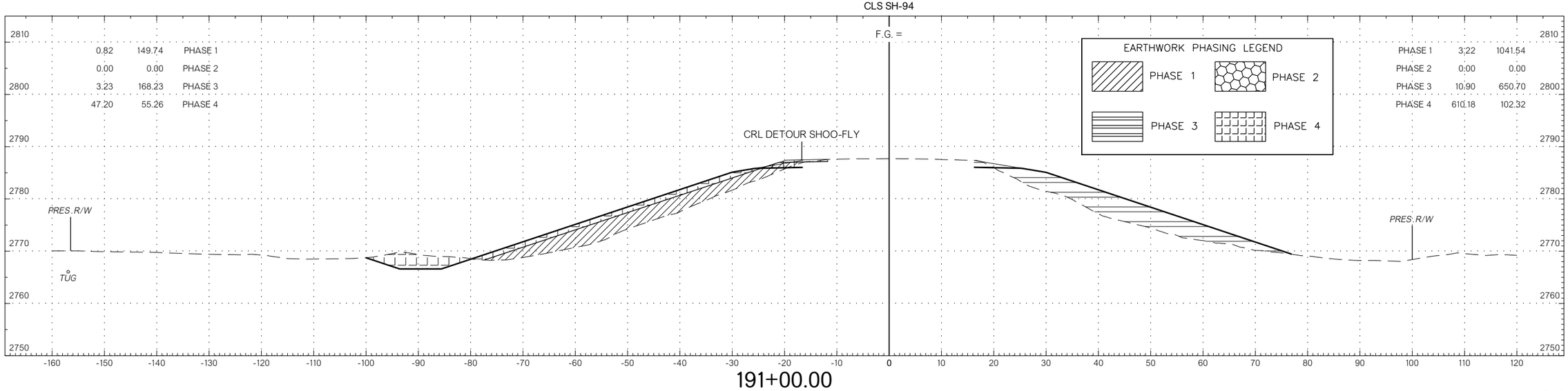
CLS SH-94



192+02.19

192+02.19

CLS SH-94



0.82	149.74	PHASE 1
0.00	0.00	PHASE 2
3.23	168.23	PHASE 3
47.20	55.26	PHASE 4

PHASE 1	3.22	1041.54
PHASE 2	0.00	0.00
PHASE 3	10.90	650.70
PHASE 4	610.18	102.32

191+00.00

191+00.00

CLS SH-94

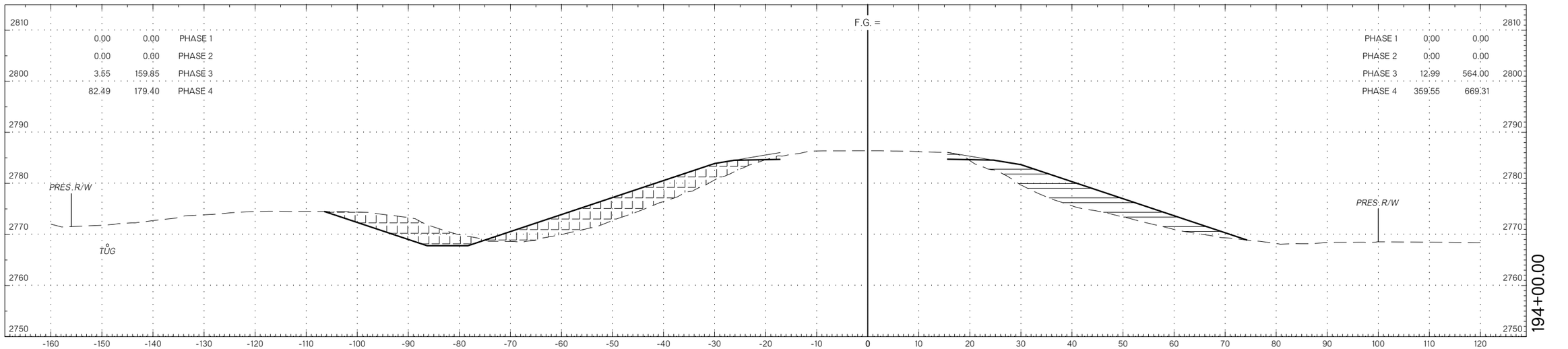
AREA
EXC. EMB.

VOLUME
EXC. EMB.

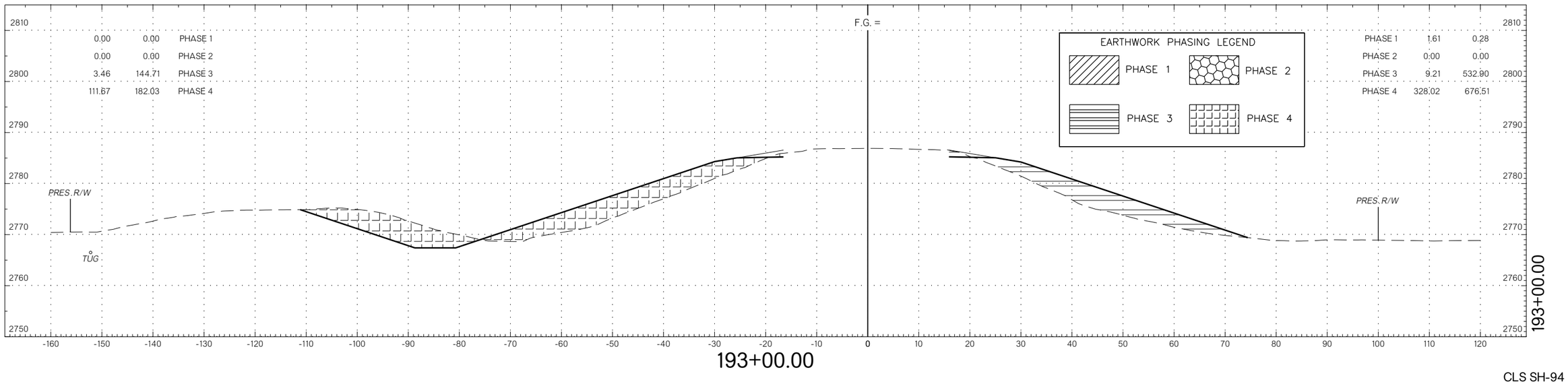
CEC // TRANSPORTATION

REVISIONS		
DESCRIPTION		DATE

CLS SH-94



CLS SH-94



CLS SH-94

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AREA
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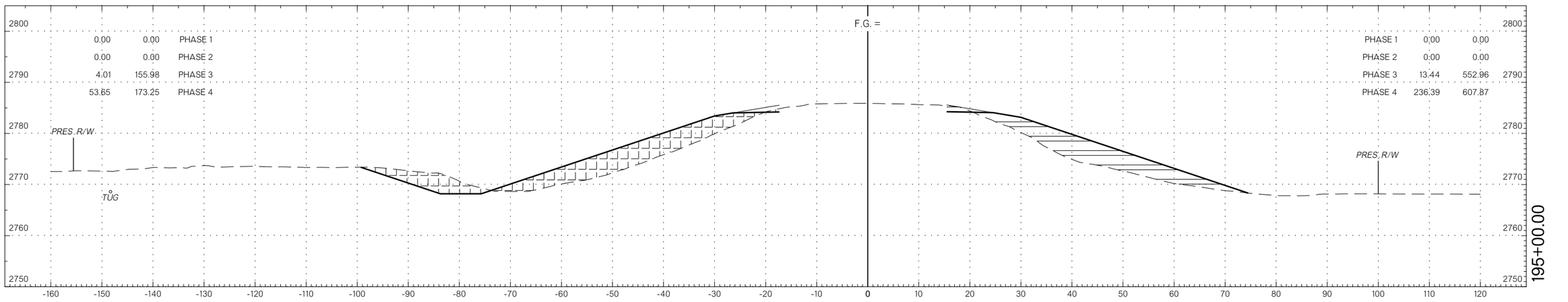
VOLUME
EXC. EMB.

CEC // TRANSPORTATION

REVISIONS	
DESCRIPTION	DATE

CLS SH-94



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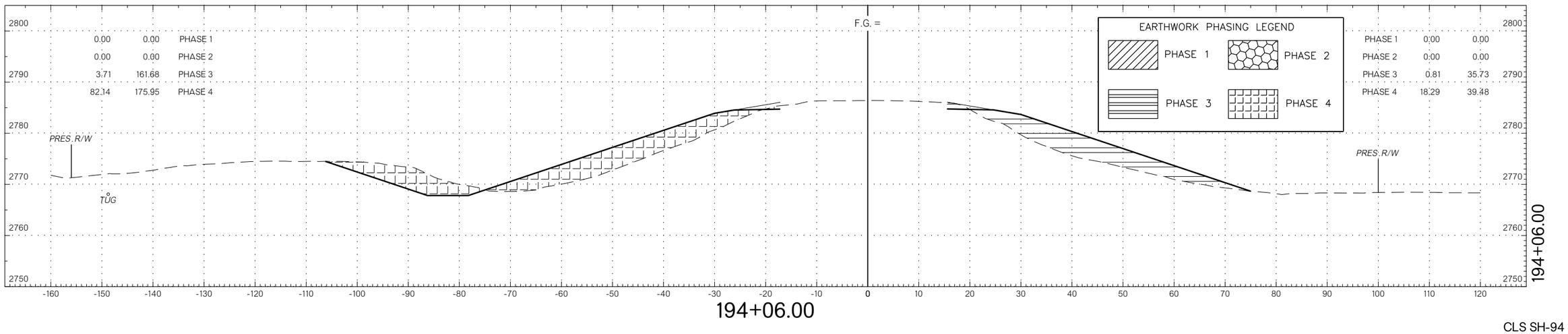

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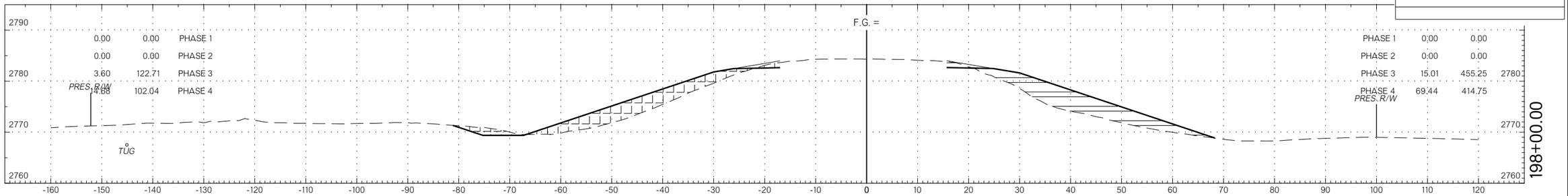

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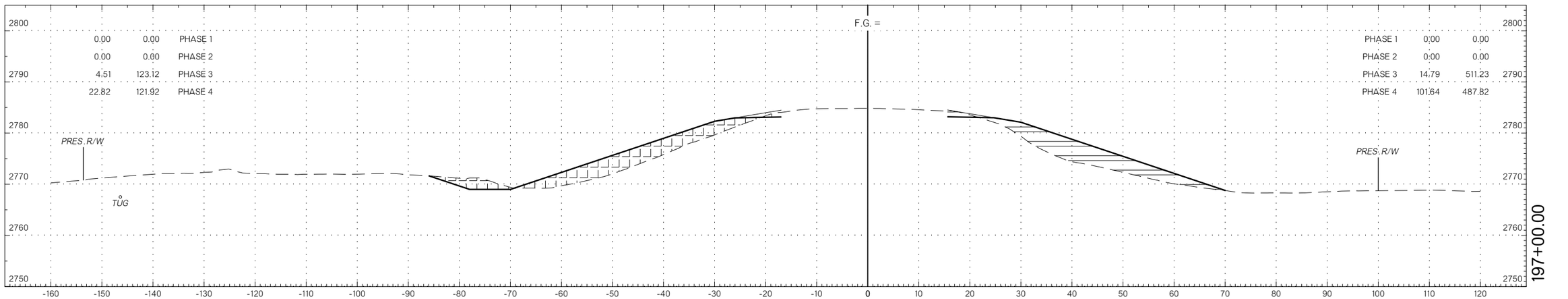

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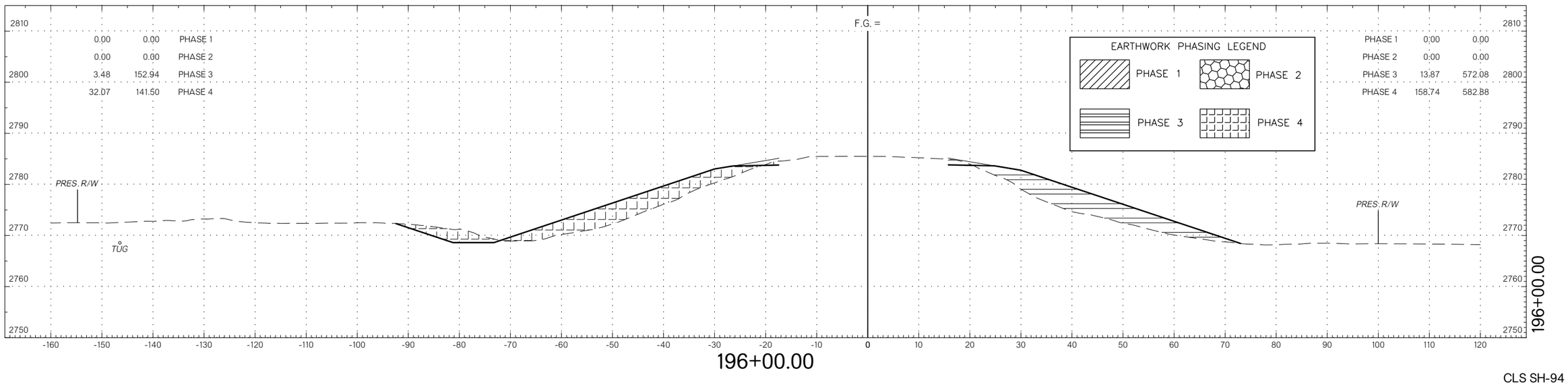

CLS SH-94

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REVISIONS	
DESCRIPTION	DATE

AREA

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VOLUME

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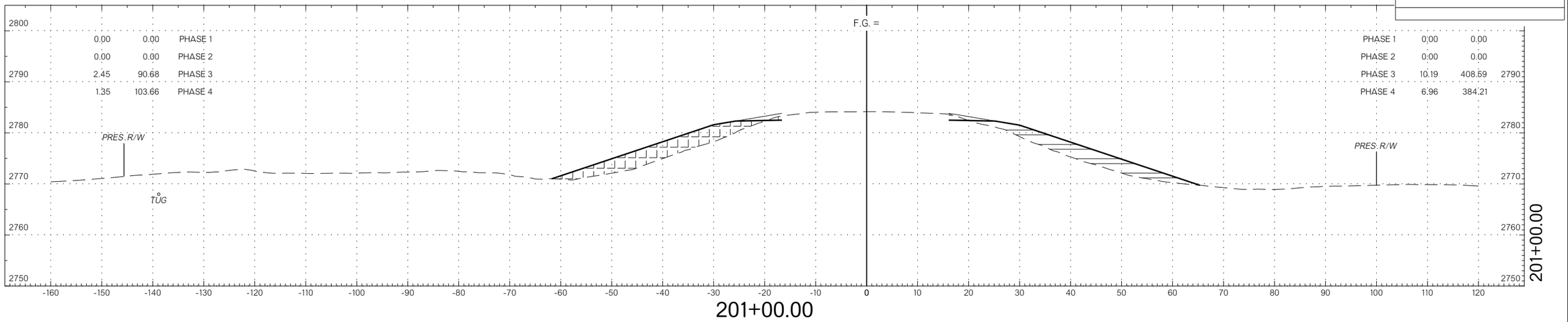
CLS SH-94



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CLS SH-94

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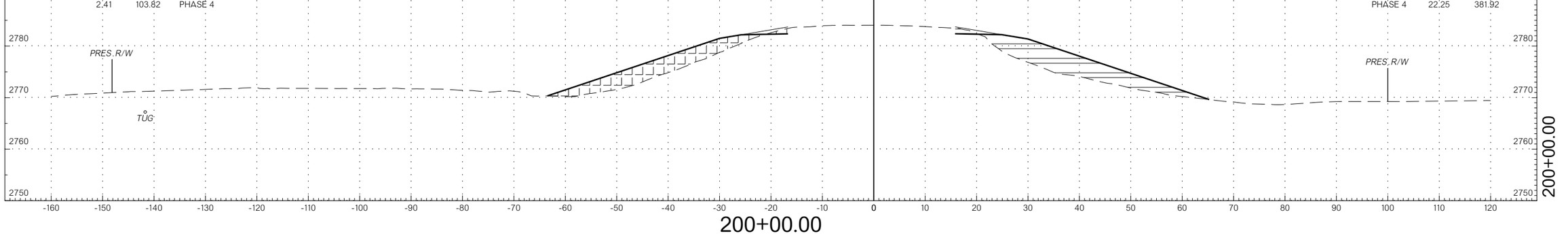

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CLS SH-94

EARTHWORK PHASING LEGEND

PHASE 1 PHASE 2 PHASE 3 PHASE 4

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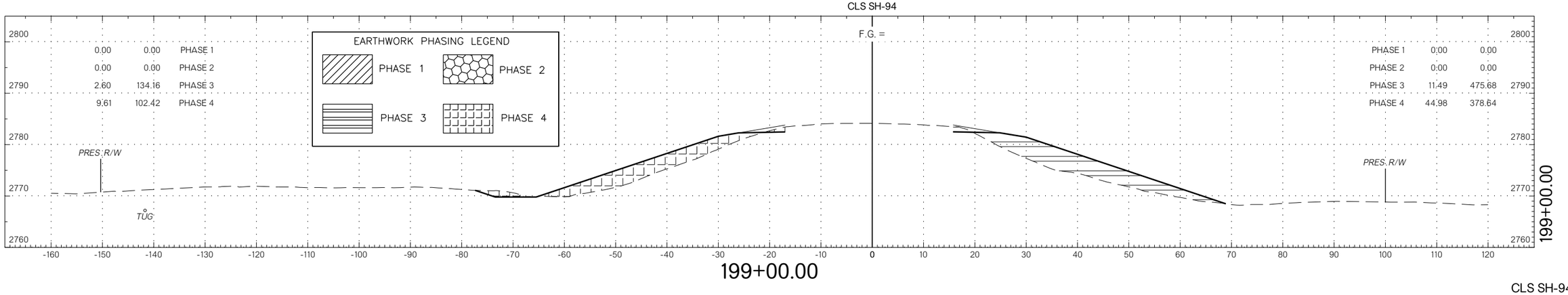

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CLS SH-94

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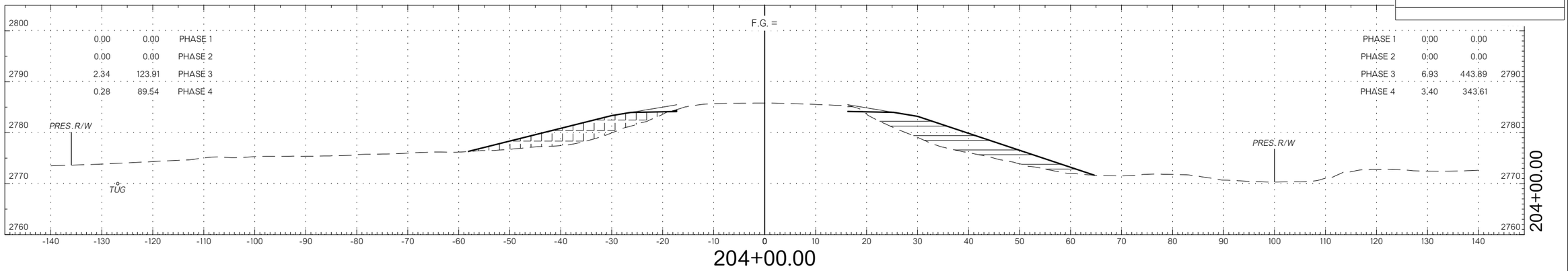

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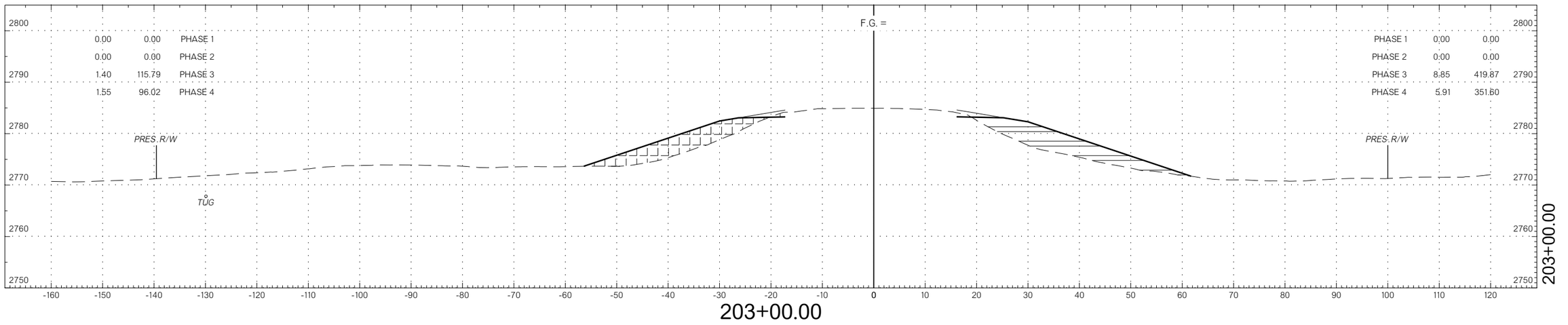

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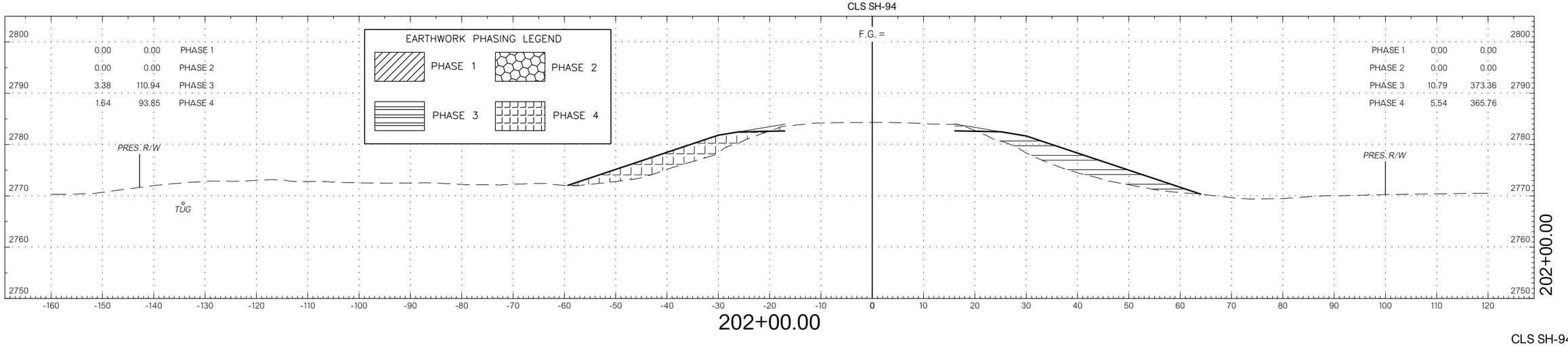

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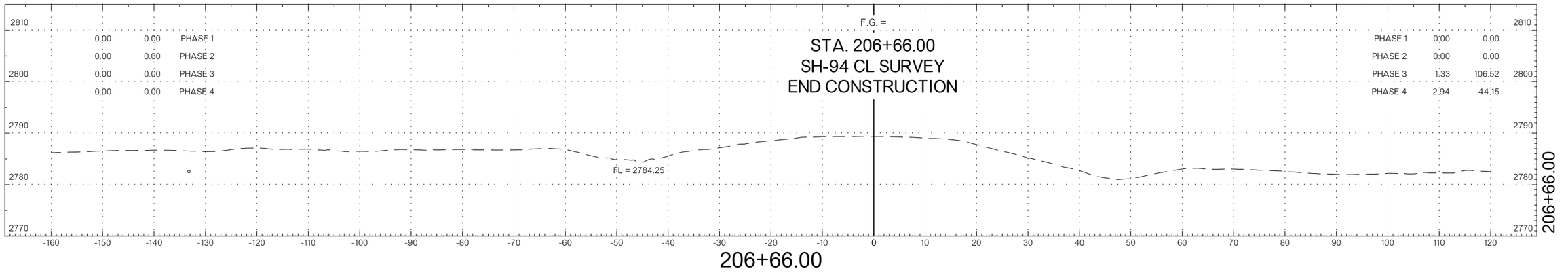

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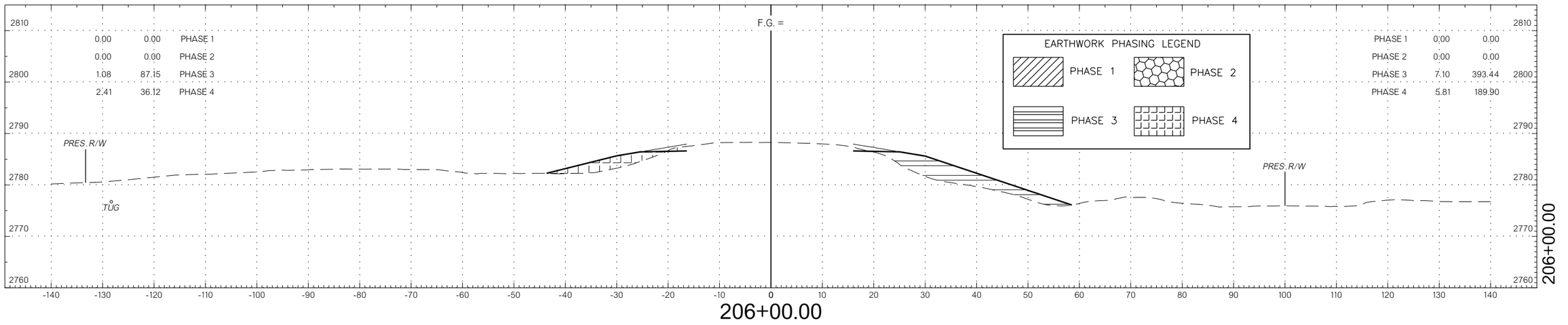

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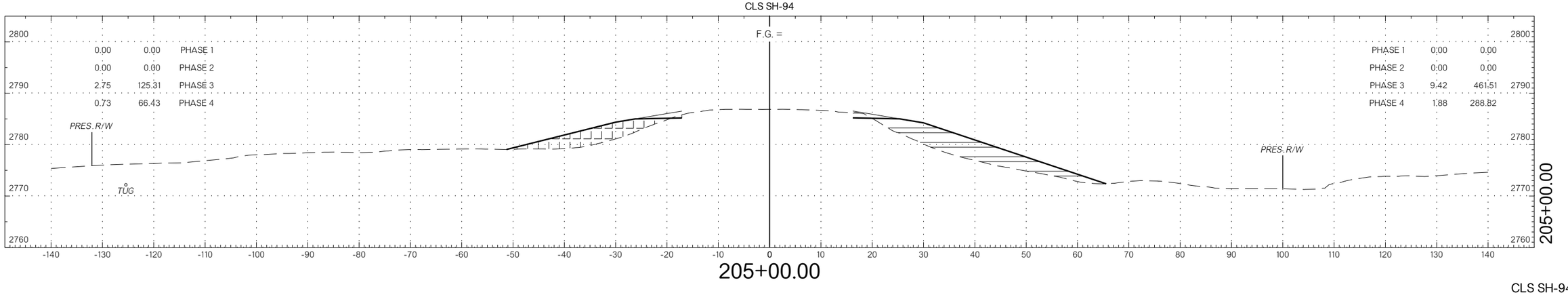

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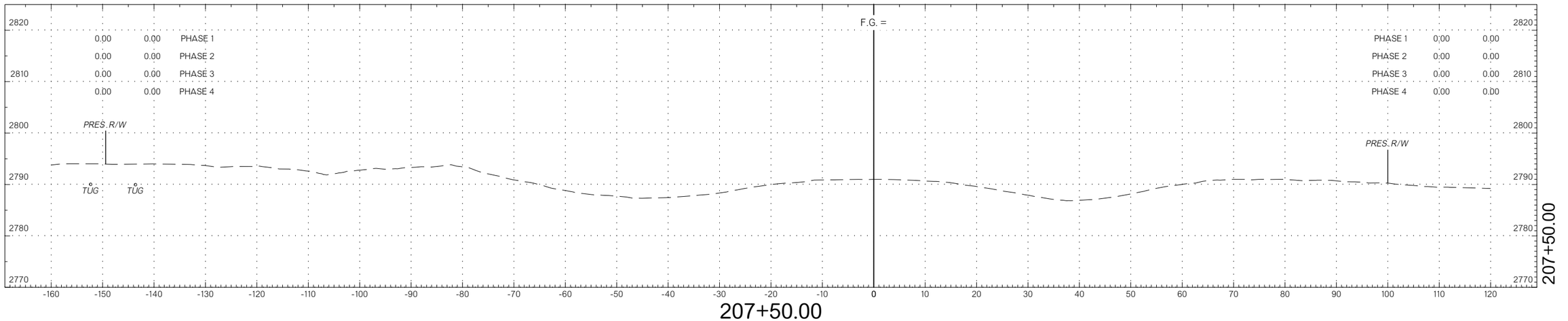

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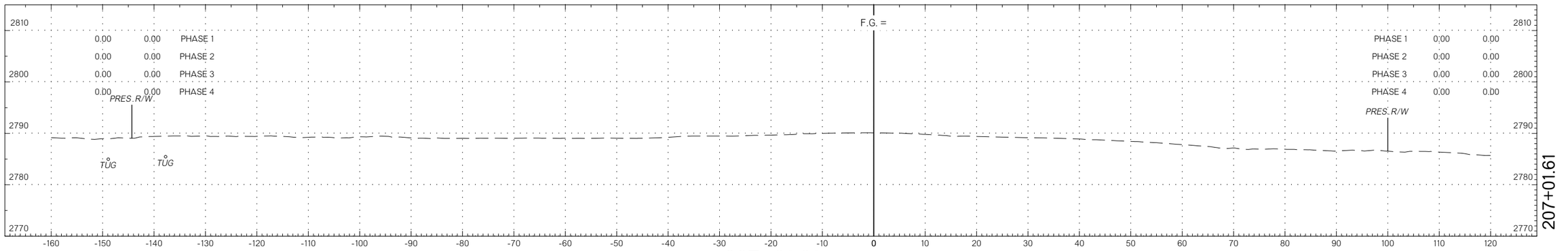

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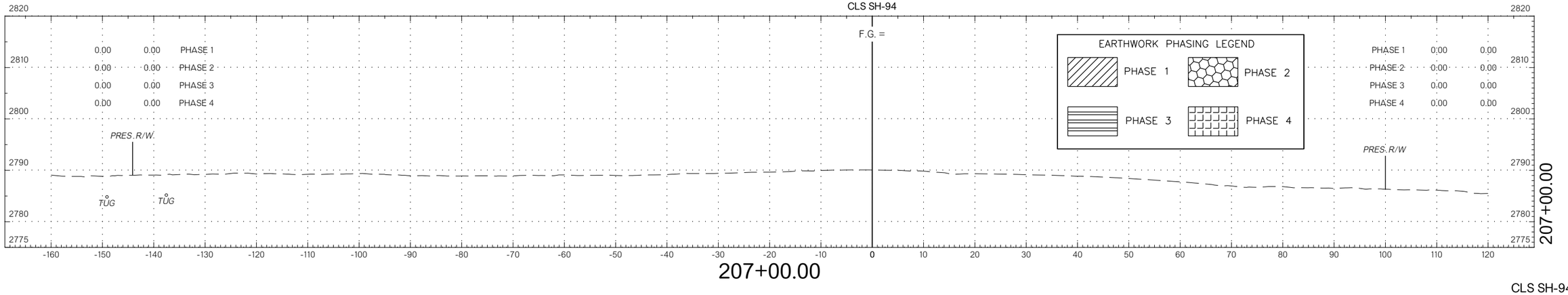

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