

**Dallas to Houston High-Speed Rail  
Draft Environmental Impact Statement**

**Appendix G:  
Dallas to Houston High-Speed Rail  
Passenger Service from Houston to Dallas  
Final Draft Conceptual Engineering  
Plans and Details  
Set 4 of 21**



**TEXAS  
CENTRAL**

## Transmittal

To	Megan Inman, AECOM	Date	November 17, 2017
Copies	FRA: K. Wright AECOM: J. Smiley TCRR: A. Greer File: HOU TCR	TRA Number	00211
From	Christopher Taylor, Arup		
Subject	FINAL DRAFT CONCEPTUAL ENGINEERING DESIGN DOCUMENTATION – FDCE v7 Transmittal Final Version for Publication with Draft Environmental Impact Statement (DEIS) FDCE for Public Release		

### We Are Sending You: ENTER DOCUMENT TYPE CODE(S) ONLY

Date of Document	DEIS Appendix	Set # of #	Title of Document or Drawing Title
11/17/17	-	-	234180-AFN-TRA-00211 FDCEv7.PDF (this transmittal)
<b>REPORTS</b>			
9/15/17	F	1 of 2	TCRR FDCE v7 REPORT.PDF ( <i>Final Draft Conceptual Engineering Report v7 – Project Definition for publication with Draft EIS</i> )
9/15/17	F	2 of 2	TCRR CONSTRUCTABILITY v4 REPORT.PDF
<b>TCRR FDCE v7 DWGS VOLUME 1 (General Sheets and Typical Sections)</b>			
9/15/17	G	1 of 21	TCRR FDCE v7 DWGS VOLUME 1.PDF ( <i>General Sheets and Typical Sections</i> )
<b>TCRR FDCE v7 DWGS VOLUME 2 (Railway Alignment Plan and Profile Sheets)</b>			
9/15/17	G	2 of 21	TCRR FDCE v7 DWGS VOLUME 2-1.PDF ( <i>Houston Segment</i> )
9/15/17	G	3 of 21	TCRR FDCE v7 DWGS VOLUME 2-2.PDF ( <i>West of Teague Segment</i> )
9/15/17	G	4 of 21	TCRR FDCE v7 DWGS VOLUME 2-3.PDF ( <i>IH-45 Segment</i> )
9/15/17	G	5 of 21	TCRR FDCE v7 DWGS VOLUME 2-4.PDF ( <i>Navarro West Segment</i> )
9/15/17	G	6 of 21	TCRR FDCE v7 DWGS VOLUME 2-5.PDF ( <i>Navarro East Segment</i> )
9/15/17	G	7 of 21	TCRR FDCE v7 DWGS VOLUME 2-6.PDF ( <i>Ellis West Segment</i> )
9/15/17	G	8 of 21	TCRR FDCE v7 DWGS VOLUME 2-7.PDF ( <i>Ellis East Segment</i> )
9/15/17	G	9 of 21	TCRR FDCE v7 DWGS VOLUME 2-8.PDF ( <i>Dallas Segment</i> )
<b>TCRR FDCE v7 DWGS VOLUME 3 (Stations, Maintenance Facilities, and Railway Systems Sheets)</b>			
9/15/17	G	10 of 21	TCRR FDCE v7 DWGS VOLUME 3-1.PDF ( <i>Stations</i> )
9/15/17	G	11 of 21	TCRR FDCE v7 DWGS VOLUME 3-2.PDF ( <i>Maintenance Facilities, Yards and Shops</i> )
9/15/17	G	12 of 21	TCRR FDCE v7 DWGS VOLUME 3-3.PDF ( <i>Rail Systems</i> )
<b>TCRR FDCE v7 DWGS VOLUME 4 (Roadway Plan Sheets)</b>			
9/15/17	G	13 of 21	TCRR FDCE v7 DWGS VOLUME 4-1.PDF ( <i>Houston Segment</i> )
9/15/17	G	14 of 21	TCRR FDCE v7 DWGS VOLUME 4-2.PDF ( <i>West of Teague Segment</i> )
9/15/17	G	15 of 21	TCRR FDCE v7 DWGS VOLUME 4-3.PDF ( <i>IH-45 Segment</i> )
9/15/17	G	16 of 21	TCRR FDCE v7 DWGS VOLUME 4-4.PDF ( <i>Navarro West Segment</i> )
9/15/17	G	17 of 21	TCRR FDCE v7 DWGS VOLUME 4-5.PDF ( <i>Navarro East Segment</i> )





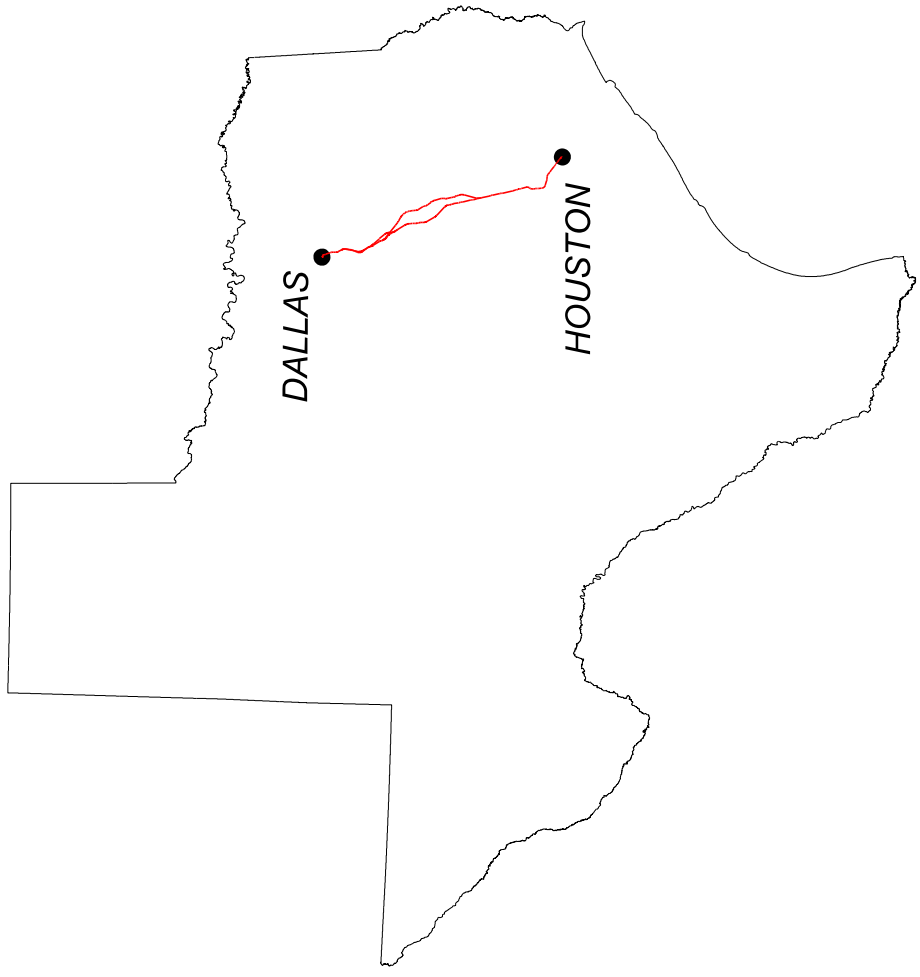
# DALLAS TO HOUSTON HIGH-SPEED RAIL

PASSENGER SERVICE FROM HOUSTON TO DALLAS

## FINAL DRAFT CONCEPTUAL ENGINEERING PLANS AND DETAILS

VOLUME 2 - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

SEPTEMBER 15, 2017

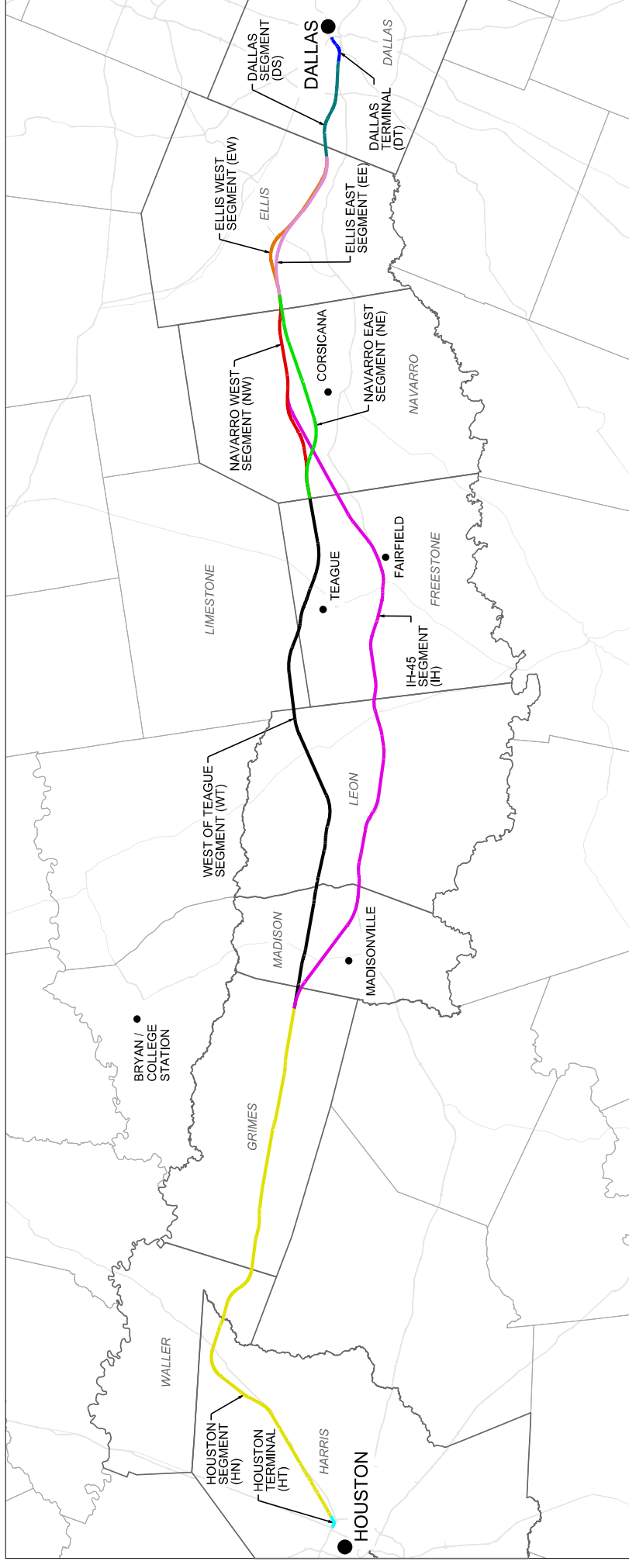


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COVER SHEET





ALIGNMENT ALTERNATIVE	TOE SEGMENT ID	SEGMENT NAMES	SEGMENT ABBREVIATION
A	5-4A, 3A, 2A, 1	DALLAS SEGMENT, ELLIS WEST SEGMENT, NAVARRO WEST SEGMENT, WEST OF TEAGUE SEGMENT, HOUSTON SEGMENT	DS, EW, NW, WT, HN
B	5-4A, 3B, 2A, 1	DALLAS SEGMENT, ELLIS WEST SEGMENT, NAVARRO EAST SEGMENT, WEST OF TEAGUE SEGMENT, HOUSTON SEGMENT	DS, EW, NE, WT, HN
C	5-4A, 2B, 1	DALLAS SEGMENT, ELLIS WEST SEGMENT, IH-45 SEGMENT, HOUSTON SEGMENT	DS, EW, IH, HN
D	5-4B, 3A, 2A, 1	DALLAS SEGMENT, ELLIS EAST SEGMENT, NAVARRO WEST SEGMENT, WEST OF TEAGUE SEGMENT, HOUSTON SEGMENT	DS, EE, NW, WT, HN
E	5-4B, 3A, 2A, 1	DALLAS SEGMENT, ELLIS EAST SEGMENT, NAVARRO EAST SEGMENT, WEST OF TEAGUE SEGMENT, HOUSTON SEGMENT	DS, EE, NE, WT, HN
F	5-4B, 2B, 1	DALLAS SEGMENT, ELLIS EAST SEGMENT, IH-45 SEGMENT, HOUSTON SEGMENT	DS, EE, IH, HN

NOTES:

1. REFER TO FDCE V5 FOR SEGMENT NAMES AND ALIGNMENT ALTERNATIVES.



DESIGNED BY	D. THOMPSON			
CHECKED BY	D. THOMPSON			
IN CHARGE	R. BURNS			
DATE	09/15/2017			
REV	DATE	BY	CHK	APP

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Client: **GENERAL LOCATION PLAN**

Scale: **AS SHOWN**  
 Drawing Title: **FINAL DRAFT**  
 Job No: **234180**  
 Drawing No: **GEN-00-00002**  
 Rev: **01**

VOLUME 1 - GENERAL SHEETS & TYPICAL SECTIONS

DRAWING NO.	DRAWING DESCRIPTIONS
1-1 GENERAL	DRAWING DESCRIPTIONS
COVER SHEET	
GEN-00-00002	GENERAL - LOCATION PLAN
GEN-00-00003	GENERAL - INDEX SHEET 1 OF 5
GEN-00-00004	GENERAL - INDEX SHEET 2 OF 5
GEN-00-00005	GENERAL - INDEX SHEET 3 OF 5
GEN-00-00006	GENERAL - INDEX SHEET 4 OF 5
GEN-00-00007	GENERAL - INDEX SHEET 5 OF 5
GEN-00-00008	GENERAL - NOTES
GEN-00-00009	GENERAL - ABBREVIATIONS AND LEGEND
GEN-00-00010	GENERAL - RAIL ANNOTATION TO CLARIFY DESIGN INTENT
GEN-00-00011	GENERAL - ROADWAY ANNOTATION TO CLARIFY DESIGN INTENT
1-2 RAILWAY TYPICAL SECTIONS	
CVL-00-03001	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 1 OF 20
CVL-00-03002	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 2 OF 20
CVL-00-03003	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 3 OF 20
CVL-00-03004	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 4 OF 20
CVL-00-03005	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 5 OF 20
CVL-00-03006	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 6 OF 20
CVL-00-03007	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 7 OF 20
CVL-00-03008	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 8 OF 20
CVL-00-03009	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 9 OF 20
CVL-00-03010	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 10 OF 20
CVL-00-03011	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 11 OF 20
CVL-00-03012	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 12 OF 20
CVL-00-03013	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 13 OF 20
CVL-00-03014	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 14 OF 20
CVL-00-03015	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 15 OF 20
CVL-00-03016	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 16 OF 20
CVL-00-03017	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 17 OF 20
CVL-00-03018	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 18 OF 20
CVL-00-03019	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 19 OF 20
CVL-00-03020	GENERAL - CIVIL RAIL - TYPICAL SECTIONS - SHEET 20 OF 20
1-3 ROADWAY AND GRADE SEPARATION TYPICAL SECTIONS	
CVL-00-03030	GENERAL - CIVIL HIGHWAY - TYPICAL SECTIONS SHEET 1 OF 5
CVL-00-03031	GENERAL - CIVIL HIGHWAY - TYPICAL SECTIONS SHEET 2 OF 5
CVL-00-03032	GENERAL - CIVIL HIGHWAY - TYPICAL SECTIONS SHEET 3 OF 5
CVL-00-03033	GENERAL - CIVIL HIGHWAY - TYPICAL SECTIONS SHEET 4 OF 5
CVL-00-03034	GENERAL - CIVIL HIGHWAY - TYPICAL SECTIONS SHEET 5 OF 5
CVL-00-03036	GENERAL - CIVIL HIGHWAY - ROAD OVER RAIL GRADE SEPARATION
1-4 CIVIL STRUCTURES TYPICAL DETAILS	
CST-00-03007	GENERAL - CIVIL STRUCTURES - STRADDLE BENT - SHEET 1 OF 2
CST-00-03008	GENERAL - CIVIL STRUCTURES - STRADDLE BENT - SHEET 2 OF 2
CST-00-03009	GENERAL - CIVIL STRUCTURES - CROSSOVER STRUCTURE - SHEET 1 OF 2
CST-00-03010	GENERAL - CIVIL STRUCTURES - CROSSOVER STRUCTURE - SHEET 2 OF 2
CST-00-03020	GENERAL - CIVIL STRUCTURES - CULVERT & ANIMAL CROSSING TYPICAL DETAIL
CST-00-03021	GENERAL - CIVIL STRUCTURES - BOX TYPICAL DETAIL - SHEET 1 OF 2
CST-00-03022	GENERAL - CIVIL STRUCTURES - BOX TYPICAL DETAIL - SHEET 2 OF 2
CST-00-03023	GENERAL - CIVIL STRUCTURES - SLAB BRIDGE TYPICAL DETAIL
1-5 CIVIL UTILITIES TYPICAL DETAILS	
CUT-00-01000	GENERAL - CIVIL UTILITIES TYPICAL CROSSING DETAIL
1-6 GENERAL - ALIGNMENT CURVE DATA TABLES	
GEN-00-04001	GENERAL - ALIGNMENT AND CURVE DATA SHEET 1 OF 2
GEN-00-04002	GENERAL - ALIGNMENT AND CURVE DATA SHEET 2 OF 2

VOLUME 2 - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

DRAWING NO.	DRAWING DESCRIPTIONS
2-1 HOUSTON SEGMENT	
CVL-HN-01101	HOUSTON SEGMENT - CIVIL - KEY MAP - Sheet 1 of 4 - HT1 10+00 TO HNI1 102+40
CVL-HN-01102	HOUSTON SEGMENT - CIVIL - KEY MAP - Sheet 2 of 4 - HNI1 102+40 TO HNI1 2082+00
CVL-HN-01103	HOUSTON SEGMENT - CIVIL - KEY MAP - Sheet 3 of 4 - HNI1 2082+00 TO HNI1 814+00
CVL-HN-01104	HOUSTON SEGMENT - CIVIL - KEY MAP - Sheet 4 of 4 - HNI1 814+00 TO HNI2 2073+80
CVL-HN-01105	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HT1 10+00 TO HT1 38+00
CVL-HN-01106	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HT1 38+00 TO HT1 60+00
CVL-HN-01107	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HT1 60+00 TO HT1 88+00
CVL-HN-01108	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HT1 88+00 TO HNI1 16+00
CVL-HN-01109	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HT1 16+00 TO HT12 46+00
CVL-HN-01102	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HT2 18+00 TO HT2 46+00

REVISION NO.	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY <b>D. THOMPSON</b>
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GENERAL INDEX SHEET 1 OF 5

Scale: NO SCALE	Sheet No: 234180
Drawing No: 234180	Job No: 234180
Client: TEXAS CENTRAL	Contract No: GEN-00-00003
Revision: 01	Revision: 01

DRAWING NO.	DRAWING DESCRIPTIONS
CVL-HN-01181	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 646+00 TO HNI2 702+00
CVL-HN-01182	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 702+00 TO HNI2 758+00
CVL-HN-01183	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 758+00 TO HNI2 814+00
CVL-HN-01184	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 814+00 TO HNI2 870+00
CVL-HN-01185	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 870+00 TO HNI2 926+00
CVL-HN-01186	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 926+00 TO HNI2 982+00
CVL-HN-01187	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 982+00 TO HNI2 1038+00
CVL-HN-01188	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 1038+00 TO HNI2 1094+00
CVL-HN-01189	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 1094+00 TO HNI2 1150+00
CVL-HN-01190	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 1150+00 TO HNI2 1206+00
CVL-HN-01191	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 1206+00 TO HNI2 1262+00
CVL-HN-01192	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 1262+00 TO HNI2 1318+00
CVL-HN-01193	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 1318+00 TO HNI2 1374+00
CVL-HN-01194	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 1374+00 TO HNI2 1430+00
CVL-HN-01195	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 1430+00 TO HNI2 1486+00
CVL-HN-01196	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 1486+00 TO HNI2 1542+00
CVL-HN-01197	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 1542+00 TO HNI2 1598+00
CVL-HN-01198	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 1598+00 TO HNI2 1654+00
CVL-HN-01199	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 1654+00 TO HNI2 1710+00
CVL-HN-01200	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 1710+00 TO HNI2 1766+00
CVL-HN-01201	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 1766+00 TO HNI2 1822+00
CVL-HN-01202	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 1822+00 TO HNI2 1878+00
CVL-HN-01203	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 1878+00 TO HNI2 1934+00
CVL-HN-01204	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 1934+00 TO HNI2 1990+00
CVL-HN-01205	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 1990+00 TO HNI2 2046+00
CVL-HN-01206	HOUSTON SEGMENT - CIVIL - PLAN AND PROFILE - HNI2 2046+00 TO HNI2 2073+80
2-2 WEST OF TEAGUE SEGMENT	
CVL-WT-01250	WEST OF TEAGUE SEGMENT - CIVIL - KEY MAP - SHEET 1 OF 4 - WT 10+00 TO WT 1130+00
CVL-WT-01251	WEST OF TEAGUE SEGMENT - CIVIL - KEY MAP - SHEET 2 OF 4 - WT 1130+00 TO WT 2250+00
CVL-WT-01252	WEST OF TEAGUE SEGMENT - CIVIL - KEY MAP - SHEET 3 OF 4 - WT 2250+00 TO WT 3370+00
CVL-WT-01253	WEST OF TEAGUE SEGMENT - CIVIL - KEY MAP - SHEET 4 OF 4 - WT 3370+00 TO WT 4418+87
CVL-WT-01254	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 10+00 TO WT 66+00
CVL-WT-01255	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 66+00 TO WT 122+00
CVL-WT-01256	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 122+00 TO WT 178+00
CVL-WT-01257	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 178+00 TO WT 234+00
CVL-WT-01258	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 234+00 TO WT 290+00
CVL-WT-01259	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 290+00 TO WT 346+00
CVL-WT-01260	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 346+00 TO WT 402+00
CVL-WT-01261	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 402+00 TO WT 458+00
CVL-WT-01262	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 458+00 TO WT 514+00
CVL-WT-01263	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 514+00 TO WT 570+00
CVL-WT-01264	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 570+00 TO WT 626+00
CVL-WT-01265	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 626+00 TO WT 682+00
CVL-WT-01266	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 682+00 TO WT 738+00
CVL-WT-01267	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 738+00 TO WT 794+00
CVL-WT-01268	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 794+00 TO WT 850+00
CVL-WT-01269	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 850+00 TO WT 906+00
CVL-WT-01270	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 906+00 TO WT 962+00
CVL-WT-01271	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 962+00 TO WT 1018+00
CVL-WT-01272	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1018+00 TO WT 1074+00
CVL-WT-01273	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1074+00 TO WT 1130+00
CVL-WT-01274	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1130+00 TO WT 1186+00
CVL-WT-01275	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1186+00 TO WT 1242+00
CVL-WT-01276	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1242+00 TO WT 1298+00
CVL-WT-01277	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1298+00 TO WT 1354+00
CVL-WT-01278	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1354+00 TO WT 1410+00
CVL-WT-01279	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1410+00 TO WT 1466+00
CVL-WT-01280	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1466+00 TO WT 1522+00
CVL-WT-01281	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1522+00 TO WT 1578+00
CVL-WT-01282	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1578+00 TO WT 1634+00
CVL-WT-01283	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1634+00 TO WT 1690+00
CVL-WT-01284	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1690+00 TO WT 1746+00
CVL-WT-01285	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1746+00 TO WT 1802+00
CVL-WT-01286	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1802+00 TO WT 1858+00
CVL-WT-01287	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1858+00 TO WT 1914+00
CVL-WT-01288	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1914+00 TO WT 1970+00
CVL-WT-01289	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 1970+00 TO WT 2026+00
CVL-WT-01290	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2026+00 TO WT 2082+00
CVL-WT-01291	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2082+00 TO WT 2138+00
CVL-WT-01292	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2138+00 TO WT 2194+00
CVL-WT-01293	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2194+00 TO WT 2250+00
CVL-WT-01294	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2250+00 TO WT 2306+00
CVL-WT-01295	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2306+00 TO WT 2362+00
CVL-WT-01296	WEST OF TEAGUE SEGMENT - CIVIL - PLAN AND PROFILE - WT 2362+00 TO WT 2418+00



VOLUME 2 - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS, and drawing details. Includes sections for WEST OF TEAGUE SEGMENT, IH-45 SEGMENT, and NAVARRO WEST SEGMENT.

Table with columns: REV, DATE, BY, CHK, APP, DISCIPLINE. Lists revision details for various drawing numbers.

Table with columns: DESIGNED BY, CHECKED BY, DRAWN BY, DATE. Lists project personnel and dates.

ARUP logo and contact information for Houston, Texas office.

FRESE & NICHOLS logo and contact information for Dallas, Texas office.

INDEX SHEET 2 OF 5, TEXAS CENTRAL logo, and project information including sheet number and scale.

Main drawing index table with columns: CIVIL, NAVARRO WEST SEGMENT, CIVIL, PLAN AND PROFILE. Lists drawing numbers and descriptions for the entire project.

**HOUSTON SEGMENT - CIVIL - KEY MAP - Sheet 2 of 4 - HN1 1024+00 TO HN1 2082+00**

DRAWING NO.	DRAWING DESCRIPTIONS
1	<p><b>2-6 ELLIS WEST SEGMENT</b></p> <p>CVI-EW-01720 ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 1018+00 TO EW 1074+00</p> <p>CVI-EW-01721 ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 1074+00 TO EW 1130+00</p> <p>CVI-EW-01722 ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 1130+00 TO EW 1186+00</p> <p>CVI-EW-01723 ELLIS WEST SEGMENT - CIVIL - PLAN AND PROFILE - EW 1186+00 TO EW 1242+50</p> <p><b>2-7 ELLIS EAST SEGMENT</b></p> <p>CVI-EE-01800 ELLIS EAST SEGMENT - CIVIL - KEY MAP - SHEET 1 OF 2 - EE 10+00 TO EE 1074+00</p> <p>CVI-EE-01801 ELLIS EAST SEGMENT - CIVIL - KEY MAP - SHEET 2 OF 2 - EE 1074+00 TO EE 1208+15</p> <p>CVI-EE-01802 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 10+00 TO EE 66+00</p> <p>CVI-EE-01803 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 66+00 TO EE 122+00</p> <p>CVI-EE-01804 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 122+00 TO EE 178+00</p> <p>CVI-EE-01805 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 178+00 TO EE 234+00</p> <p>CVI-EE-01806 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 234+00 TO EE 290+00</p> <p>CVI-EE-01807 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 290+00 TO EE 346+00</p> <p>CVI-EE-01808 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 346+00 TO EE 402+00</p> <p>CVI-EE-01809 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 402+00 TO EE 458+00</p> <p>CVI-EE-01810 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 458+00 TO EE 514+00</p> <p>CVI-EE-01811 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 514+00 TO EE 570+00</p> <p>CVI-EE-01812 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 570+00 TO EE 626+00</p> <p>CVI-EE-01813 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 626+00 TO EE 682+00</p> <p>CVI-EE-01814 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 682+00 TO EE 738+00</p> <p>CVI-EE-01815 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 738+00 TO EE 794+00</p> <p>CVI-EE-01816 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 794+00 TO EE 850+00</p> <p>CVI-EE-01817 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 850+00 TO EE 906+00</p> <p>CVI-EE-01818 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 906+00 TO EE 962+00</p> <p>CVI-EE-01819 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 962+00 TO EE 1018+00</p> <p>CVI-EE-01820 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 1018+00 TO EE 1074+00</p> <p>CVI-EE-01821 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 1074+00 TO EE 1130+00</p> <p>CVI-EE-01822 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 1130+00 TO EE 1186+00</p> <p>CVI-EE-01823 ELLIS EAST SEGMENT - CIVIL - PLAN AND PROFILE - EE 1186+00 TO EE 1208+15</p> <p><b>2-8 DALLAS SEGMENT</b></p> <p>CVI-DS-01900 DALLAS SEGMENT - CIVIL - KEY MAP - DS 10+00 TO DT 271+02</p> <p>CVI-DS-01901 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 10+00 TO DS 66+00</p> <p>CVI-DS-01902 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 66+00 TO DS 122+00</p> <p>CVI-DS-01903 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 122+00 TO DS 178+00</p> <p>CVI-DS-01904 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 178+00 TO DS 234+00</p> <p>CVI-DS-01905 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 234+00 TO DS 290+00</p> <p>CVI-DS-01906 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 290+00 TO DS 346+00</p> <p>CVI-DS-01907 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 346+00 TO DS 402+00</p> <p>CVI-DS-01908 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 402+00 TO DS 458+00</p> <p>CVI-DS-01909 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 458+00 TO DS 514+00</p> <p>CVI-DS-01910 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 514+00 TO DS 570+00</p> <p>CVI-DS-01911 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 570+00 TO DS 626+00</p> <p>CVI-DS-01912 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 626+00 TO DS 682+00</p> <p>CVI-DS-01913 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 682+00 TO DS 738+00</p> <p>CVI-DS-01914 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 738+00 TO DS 794+00</p> <p>CVI-DS-01915 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 794+00 TO DS 850+00</p> <p>CVI-DS-01916 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 850+00 TO DS 906+00</p> <p>CVI-DS-01917 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 906+00 TO DS 962+00</p> <p>CVI-DS-01918 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 962+00 TO DS 1018+00</p> <p>CVI-DS-01919 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 1018+00 TO DS 1074+00</p> <p>CVI-DS-01920 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DS 1074+00 TO EE 1130+00</p> <p>CVI-DS-01921 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - EE 1130+00 TO EE 1186+00</p> <p>CVI-DS-01922 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - EE 1186+00 TO DT 33+00</p> <p>CVI-DS-01923 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DT 33+00 TO DT 89+00</p> <p>CVI-DS-01924 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DT 89+00 TO DT 145+00</p> <p>CVI-DS-01925 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DT 145+00 TO DT 201+00</p> <p>CVI-DS-01926 DALLAS SEGMENT - CIVIL - PLAN AND PROFILE - DT 201+00 TO DT 257+02</p>

**VOLUME 3 - STATIONS, MAINTENANCE FACILITIES AND RAILWAY SYSTEMS SHEETS**

DRAWING NO.	DRAWING DESCRIPTIONS
3-1 STATIONS	<p>STA-00-02000 GENERAL - STATIONS - TYPICAL STATION CONFIGURATION</p> <p>STA-00-02001 GENERAL - STATIONS - TYPICAL PLATFORMS CONFIGURATION</p> <p>STA-00-03000 GENERAL - TERMINAL STATIONS</p> <p>STA-00-05000 GENERAL - INTERMEDIATE STATIONS ADJACENCY DIAGRAM</p> <p>STA-00-06000 GENERAL - HOUSTON SEGMENT - STATIONS - STATION SECTIONS</p> <p>STA-HN-01001 GENERAL - HOUSTON SEGMENT - STATIONS - TRANSIT STATION OPTION - STATION AREA PLAN</p> <p>STA-HN-01002 HOUSTON SEGMENT - STATIONS - HOUSTON TRANSIT STATION OPTION - STATION FLOOR PLAN SHEET 1 OF 2</p> <p>STA-HN-01003 HOUSTON SEGMENT - STATIONS - HOUSTON TRANSIT STATION OPTION - STATION FLOOR PLAN SHEET 2 OF 2</p>

REV	DATE	BY	CHK	APP	DESCRIPTION
					D. THOMPSON
					D. THOMPSON
					R. BURNS
					C. TAYLOR
					09/15/2017

STA-HN-01004	HOUSTON SEGMENT - STATIONS - HOUSTON TRANSIT STATION OPTION - STATION SECTIONS
STA-HN-01005	HOUSTON SEGMENT - STATIONS - HOUSTON TRANSIT STATION OPTION - CIVIL SITE PLAN
STA-HN-01011	HOUSTON SEGMENT - STATIONS - HOUSTON NORTHWEST MAIL STATION OPTION - STATION AREA PLAN
STA-HN-01012	HOUSTON SEGMENT - STATIONS - HOUSTON NORTHWEST MAIL STATION OPTION - STATION FLOOR PLAN SHEET 1 OF 2
STA-HN-01013	HOUSTON SEGMENT - STATIONS - HOUSTON NORTHWEST MAIL STATION OPTION - STATION FLOOR PLAN SHEET 2 OF 2
STA-HN-01014	HOUSTON SEGMENT - STATIONS - HOUSTON NORTHWEST MAIL STATION OPTION - STATION SECTIONS
STA-HN-01015	HOUSTON SEGMENT - STATIONS - HOUSTON NORTHWEST MAIL STATION OPTION - CIVIL SITE PLAN
STA-HN-01021	HOUSTON SEGMENT - STATIONS - HOUSTON INDUSTRIAL STATION OPTION - STATION AREA PLAN
STA-HN-01022	HOUSTON SEGMENT - STATIONS - HOUSTON INDUSTRIAL STATION OPTION - STATION FLOOR PLAN SHEET 1 OF 2
STA-HN-01023	HOUSTON SEGMENT - STATIONS - HOUSTON INDUSTRIAL STATION OPTION - STATION FLOOR PLAN SHEET 2 OF 2
STA-HN-01024	HOUSTON SEGMENT - STATIONS - HOUSTON INDUSTRIAL STATION OPTION - STATION SECTIONS
STA-HN-01025	HOUSTON SEGMENT - STATIONS - HOUSTON INDUSTRIAL STATION OPTION - CIVIL SITE PLAN
STA-HN-01031	HOUSTON SEGMENT - STATIONS - BRAZOS VALLEY STATION - STATION AREA PLAN
STA-HN-01032	HOUSTON SEGMENT - STATIONS - BRAZOS VALLEY STATION - STATION FLOOR PLAN SHEET
STA-HN-01033	HOUSTON SEGMENT - STATIONS - BRAZOS VALLEY STATION - STATION SECTIONS
STA-HN-01034	HOUSTON SEGMENT - STATIONS - BRAZOS VALLEY STATION - CIVIL SITE PLAN
STA-DS-01041	DALLAS SEGMENT - STATIONS - DALLAS STATION - STATION AREA PLAN
STA-DS-01042	DALLAS SEGMENT - STATIONS - DALLAS STATION - STATION FLOOR PLAN SHEET 1 OF 3
STA-DS-01043	DALLAS SEGMENT - STATIONS - DALLAS STATION - STATION FLOOR PLAN SHEET 2 OF 3
STA-DS-01044	DALLAS SEGMENT - STATIONS - DALLAS STATION - STATION FLOOR PLAN SHEET 3 OF 3
STA-DS-01045	DALLAS SEGMENT - STATIONS - DALLAS STATION - STATION SECTIONS SHEET 1 OF 3
STA-DS-01046	DALLAS SEGMENT - STATIONS - DALLAS STATION - STATION SECTIONS SHEET 2 OF 3
STA-DS-01047	DALLAS SEGMENT - STATIONS - DALLAS STATION - STATION SECTIONS - FUTURE EXPANSION SHEET 3 OF 3
STA-DS-01048	DALLAS SEGMENT - STATIONS - DALLAS STATION - TYPICAL PEDESTRIAN STREETScape
STA-DS-01049	DALLAS SEGMENT - STATIONS - DALLAS STATION - CIVIL SITE PLAN
STA-DS-01050	DALLAS SEGMENT - STATIONS - DALLAS STATION - HOTEL STREET REALIGNMENT - SHEET 1 OF 2
STA-DS-01051	DALLAS SEGMENT - STATIONS - DALLAS STATION - HOTEL STREET REALIGNMENT - SHEET 2 OF 2
STA-DS-01052	DALLAS SEGMENT - STATIONS - DALLAS STATION - BELLEVUE STREET REALIGNMENT
STA-DS-01053	DALLAS SEGMENT - STATIONS - DALLAS STATION - PROPOSED STREET 1 REALIGNMENT
STA-DS-01054	DALLAS SEGMENT - STATIONS - DALLAS STATION - PROPOSED STREET 2 REALIGNMENT
MNT-00-02002	<b>3-2 MAINTENANCE FACILITIES, YARDS AND SHOPS</b>
MNT-00-02003	GENERAL - MAINTENANCE FACILITIES - TYPICAL SIDING OFF
MNT-00-02004	GENERAL - MAINTENANCE FACILITIES - TYPICAL SIDING OFF
MNT-00-02005	GENERAL - MAINTENANCE AND TMF FACILITIES - KEY MAP
MNT-HN-04000	HOUSTON SEGMENT - MAINTENANCE FACILITIES - HOUSTON SOUTH TMF - SHEET 1 OF 3
MNT-HN-04001	HOUSTON SEGMENT - MAINTENANCE FACILITIES - HOUSTON SOUTH TMF - SHEET 2 OF 3
MNT-HN-04002	HOUSTON SEGMENT - MAINTENANCE FACILITIES - HOUSTON SOUTH TMF - SHEET 3 OF 3
MNT-HN-04003	HOUSTON SEGMENT - MAINTENANCE FACILITIES - HOUSTON SOUTH TMF - TRACK REALIGNMENT - SHEET 1 OF 5
MNT-HN-04004	HOUSTON SEGMENT - MAINTENANCE FACILITIES - HOUSTON SOUTH TMF - TRACK REALIGNMENT - SHEET 2 OF 5
MNT-HN-04005	HOUSTON SEGMENT - MAINTENANCE FACILITIES - HOUSTON SOUTH TMF - TRACK REALIGNMENT - SHEET 3 OF 5
MNT-HN-04006	HOUSTON SEGMENT - MAINTENANCE FACILITIES - HOUSTON SOUTH TMF - TRACK REALIGNMENT - SHEET 4 OF 5
MNT-HN-04007	HOUSTON SEGMENT - MAINTENANCE FACILITIES - HOUSTON SOUTH TMF - TRACK REALIGNMENT - SHEET 5 OF 5
MNT-HN-04008	HOUSTON SEGMENT - MAINTENANCE FACILITIES - HOUSTON NORTH TMF - SHEET 1 OF 3
MNT-HN-04009	HOUSTON SEGMENT - MAINTENANCE FACILITIES - HOUSTON NORTH TMF - SHEET 2 OF 3
MNT-HN-04010	HOUSTON SEGMENT - MAINTENANCE FACILITIES - HOUSTON NORTH TMF - SHEET 3 OF 3
MNT-HN-04011	HOUSTON SEGMENT - MOW FACILITY HN-2 - LAYOUT - SHEET 1 OF 2
MNT-HN-04012	HOUSTON SEGMENT - MOW FACILITY HN-4 - LAYOUT - SHEET 1 OF 2
MNT-HN-04013	HOUSTON SEGMENT - MOW FACILITY HN-4 - LAYOUT - SHEET 2 OF 2
MNT-HN-04014	HOUSTON SEGMENT - MOW FACILITY HN-5 - LAYOUT - SHEET 1 OF 2
MNT-HN-04015	HOUSTON SEGMENT - MOW FACILITY HN-5 - LAYOUT - SHEET 2 OF 2
MNT-WT-04016	WEST OF TEAGUE SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY WT-1 - LAYOUT - SHEET 1 OF 2
MNT-WT-04017	WEST OF TEAGUE SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY WT-1 - LAYOUT - SHEET 2 OF 2
MNT-WT-04018	WEST OF TEAGUE SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 1 OF 2
MNT-WT-04019	WEST OF TEAGUE SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 2 OF 2
MNT-WT-04020	WEST OF TEAGUE SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY WT-2 - LAYOUT - SHEET 1 OF 2
MNT-WT-04021	WEST OF TEAGUE SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY WT-2 - LAYOUT - SHEET 2 OF 2
MNT-HH-04022	HH-45 SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY HH-1 - LAYOUT - SHEET 1 OF 3
MNT-HH-04023	HH-45 SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY HH-1 - LAYOUT - SHEET 2 OF 3
MNT-HH-04024	HH-45 SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY HH-1 - LAYOUT - SHEET 3 OF 3
MNT-HH-04025	HH-45 SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 1 OF 8
MNT-HH-04026	HH-45 SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 2 OF 8
MNT-HH-04027	HH-45 SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 3 OF 8
MNT-HH-04028	HH-45 SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 4 OF 8
MNT-HH-04029	HH-45 SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 5 OF 8
MNT-HH-04030	HH-45 SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 6 OF 8
MNT-HH-04031	HH-45 SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 7 OF 8
MNT-HH-04032	HH-45 SEGMENT - MAINTENANCE FACILITIES - TRACK CONNECTION - LAYOUT - SHEET 8 OF 8
MNT-HH-04033	HH-45 SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY HH-2 - LAYOUT - SHEET 1 OF 3
MNT-HH-04034	HH-45 SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY HH-2 - LAYOUT - SHEET 2 OF 3
MNT-HH-04035	HH-45 SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY HH-2 - LAYOUT - SHEET 3 OF 3
MNT-EVW-04036	ELLIS WEST SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY EW-1 - LAYOUT - SHEET 1 OF 2
MNT-EVW-04037	ELLIS WEST SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY EW-1 - LAYOUT - SHEET 2 OF 2
MNT-EVW-04038	ELLIS EAST SEGMENT - MAINTENANCE FACILITIES - MOW FACILITY EE-1 - LAYOUT
MNT-DS-04039	DALLAS SEGMENT - MAINTENANCE FACILITIES - DALLAS SOUTH TMF - SHEET 1 OF 3

Scale: NO SCALE  
Drawing No: 234180  
Job No: GEN-00-00005  
Date: 01

GENERAL INDEX SHEET 3 OF 5

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DRS/CRP/ENR



VOLUME 3 - STATIONS, MAINTENANCE FACILITIES AND RAILWAY SYSTEMS SHEETS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS, and drawing details for maintenance facilities and railway systems.

VOLUME 4 - ROADWAY PLAN SHEETS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS, and drawing details for roadway plan sheets.

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS, and drawing details for roadway plan sheets.

Table with columns: REVISION, DATE, BY, CHK, APP, and revision details.

Table with columns: DESIGNED BY, CHECKED BY, DRAWN BY, and project information.

Table with columns: SHEET NO., TOTAL SHEETS, and sheet identification.

ARUP logo and company information.

FRESE & NICHOLS logo and company information.

TEXAS CENTRAL logo and company information.

GENERAL INDEX SHEET 4 OF 5 and NO SCALE information.

VOLUME 4 - ROADWAY PLAN SHEETS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Lists drawings 4-3 (IH-45 SEGMENT) and 4-4 (NAVARRO WEST SEGMENT) with their respective descriptions.

Table with columns: REVISION, DATE, BY, CHK, APP. Lists revisions for drawings D. THOMPSON, R. BURNS, and C. TAYLOR, dated 09/15/2017.

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Lists drawings 4-5 (NAVARRO EAST SEGMENT) and 4-6 (ELIUS WEST SEGMENT) with their respective descriptions.

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Lists drawings 4-7 (ELIUS EAST SEGMENT) and 4-8 (DALLAS SEGMENT) with their respective descriptions.

VOLUME 5 - WILDLIFE CROSSING SHEETS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Lists drawings 5-1 (WILDLIFE CROSSING TYPICAL SECTIONS) with their respective descriptions.

ARUP logo and contact information for Houston, Texas office.

FREESHE & NICHOLS logo and contact information for Dallas, Texas office.

TEXAS CENTRAL logo and contact information for Dallas, Texas office.

Project information including drawing title 'GENERAL INDEX SHEET 5 OF 5', drawing number '234180', and job number 'GEN-00-00007 01'.



GENERAL NOTES:

- THESE DRAWINGS ACCOMPANY FINAL DRAFT CONCEPTUAL ENGINEERING REPORT (FCE) V7 REPORT DATED SEPTEMBER 15, 2017.
- DRAWING SET INCLUDES FIVE (5) VOLUMES.
- CONCEPTUAL ENGINEERING WAS DEVELOPED TO IDENTIFY PROJECT LIMIT OF DISTURBANCE (LOD), OR PROJECT LIMIT OF CONSTRUCTION (PLOC), AND TO PROVIDE PROJECT DEFINITION FOR ENVIRONMENTAL ANALYSES ONLY. FINAL DESIGN WOULD BE DEVELOPED TO MITIGATE ANY IMPACTS IDENTIFIED THROUGH ENVIRONMENTAL ANALYSES. NOT FOR CONSTRUCTION.
- FOR STANDARD GENERAL ABBREVIATIONS, SEE DRAWING GEN-M0400-009.
- FOR STANDARD GENERAL SYMBOLS, SEE DRAWINGS GEN-M0400-009.
- FOR BOUNDARY SHOWN ON PROFILES, SEE TO THE APPROXIMATE EXISTING GROUND LINE AT HSR CENTERLINE AS SHOWN ON PLAN AND PROFILE DRAWINGS.
- ALL HORIZONTAL AND VERTICAL DISTANCES ARE IN US CUSTOMARY UNITS EXCEPT AS NOTED OTHERWISE. DIMENSIONAL DRAWINGS FOR ADDITIONAL NOTES.

BASEMAPING NOTES:

- DTM DATA SHOWN ON THE DRAWINGS WAS OBTAINED FROM THE TEXAS NATURAL RESOURCES INFORMATION SYSTEM (TNIS) AND HOUSTON-GALVESTON AREA COUNCIL (HGAC), DALLAS COUNTY (LIDAR, 2008), SOURCED FROM TRIM, HOAC LIDAR, 2008, TNIS LIDAR, 2006-2013, TNIS STRATHATM CONTOURS, 1997.
- LIDAR SOURCES WERE FILTERED TO SHOW ONLY BARE EARTH, AND SUPPLEMENTED BY CONTOUR DATA WHERE LIDAR SOURCES WERE NOT AVAILABLE.
- NAD 83 HORIZONTAL CONTROL DATUM WAS USED FOR HORIZONTAL COORDINATE VALUES.
- NAD 83 VERTICAL DATUM WAS USED FOR ELEVATION VALUES.
- ALL DATA HAS BEEN REFERENCED TO TEXAS STATE PLANE, SOUTH CENTRAL, CENTRAL, AND NORTH CENTRAL ZONES, US SURVEY FEET.
- GENERAL MAJORITY WAS OBTAINED FROM ONLINE BEARINGS, SOURCE: GREAT DIGITAL GLOBE (GEOVE), EARTHSTAR GEOGRAPHICS, CONESAROUS DS, USDA, USGS, AEA, GETAMPERS, AERODIG, ION, IEP, SWISSTOPO, AND THE GIS USER COMMUNITY.
- THE BACKGROUND IMAGERY ON THE PLAN SHEETS MAY SHOW BUILDINGS AND OTHER INFRASTRUCTURE FEATURES THAT HAVE SUBSEQUENTLY BEEN REMOVED AND/OR DEMOLISHED, WHERE IT HAS BEEN IDENTIFIED AS SUCH. BUILDINGS HAVE BEEN REMOVED, THE AERIAL IMAGERY ON THE PLAN SHEET IS MARKED WITH HASHES.

LOD NOTES:

- THE PROJECT LOD WAS DEVELOPED TO DEFINE A CONSERVATIVE ESTIMATE OF THE POTENTIAL "PROJECT LIMIT OF DISTURBANCE" (LOD) FOR THE PROJECT. THE LOD IS NOT INTENDED TO BE A PROPERTY LINE. THE LOD MAY BE RETURNED TO ADJACENT LANDOWNERS OR OTHER PRIVATE PARTIES FOLLOWING PROJECT CONSTRUCTION OR MAY BE TRANSFERRED TO ROADWAY OR UTILITY AUTHORITY UPON FINAL PROJECT COMPLETION. THE LOD IS NOT INTENDED TO BE A PROPERTY LINE. THE LOD IS NOT INTENDED TO BE A PROPERTY LINE. THE LOD IS NOT INTENDED TO BE A PROPERTY LINE.
- LOD USED FOR EIS ANALYSIS FOOTPRINT.

TRACK NOTES:

- THE ALIGNMENT SHOWN ON THE PLAN AND PROFILE DRAWINGS REPRESENTS THE CENTERLINE OF THE TWO-TRACK HSR MAINLINE TRACKS.
- THE PROFILE SHOWN ON THE PLAN AND PROFILE DRAWINGS REPRESENTS THE TOP OF THE LOWER RAIL THROUGH HORIZONTAL CURVES AND SPIRALS FOR THE TWO-TRACK HSR SYSTEM.
- THE PROPOSED HSR SYSTEM INCLUDES TWO TRACKS WITH ADDITIONAL TRACKS AT STATIONS. MAINTENANCE OF WAY, AND TRAINSET MAINTENANCE FACILITIES, AS SHOWN ON DRAWINGS.
- MAINLINE CROSSOVERS ARE PROVIDED AT THE ENTRANCE AND EXIT OF ALL STATIONS. MAINTENANCE OF WAY (MOW) FACILITIES, AND TRAINSET MAINTENANCE FACILITIES (TMFS).

PLAN AND PROFILE GENERAL NOTES:

- SECTION THREE (3) OF THE SURVEY ON PROFILE SHEETS REPRESENTS A SURVEY BOUNDARY OF THE MAJOR STRUCTURAL TYPE OF THE PROPOSED HSR. THE ACTUAL PLAN DIMENSIONS TAKE PRECEDENCE OVER THE SECTION TYPE IDENTIFIED IN PROFILE.
- ALL EXISTING AND PROPOSED STRUCTURAL ELEMENTS SHOWN ARE BASED ON CONCEPTUAL ENGINEERING DESIGN AND AERIAL IMAGERY AND MAY BE REFINED BASED ON MORE ADVANCED SURVEY AND DESIGN.
- SEE SHEET GEN-M0400-010 FOR A KEY TO INFORMATION SHOWN ON PLAN AND PROFILE DRAWINGS.
- LIMITS OF SPECIAL TRACK WORK ARE INDICATED ON THE PLAN SHEETS. ADDITIONAL DETAILS FOR MAINTENANCE OF WAY FACILITIES AND TRAINSET MAINTENANCE FACILITIES ARE SHOWN ON THE VOLUME 3 DRAWINGS.

ROADWAY NOTES:

- EXISTING ROADWAY LOCATIONS ARE APPROXIMATE BASED ON AERIAL IMAPS.
- PROPOSED ROADWAY WORKS, INCLUDING NEW ROADWAYS, RECONFIGURATION AND REALIGNMENTS OF EXISTING ROADWAYS, AND INTERSECTIONS, WILL BE DEVELOPED TO ACCOMMODATE THE PROPOSED HSR PROJECT. ROADWAY WORKS WOULD BE DETAILED DURING FINAL DESIGN AND WOULD COMPLY WITH APPLICABLE STATE, COUNTY, LOCAL, AND FEDERAL REQUIREMENTS.
- SEE SHEET GEN-M0400-0011 FOR A KEY TO INFORMATION SHOWN ON ROADWAY PLAN DRAWINGS.
- ROADWAY GEOMETRY IS BASED ON TxDOT ROADWAY DESIGN MANUAL. ROAD DESIGN SPEEDS MATCH EXISTING POSTED SPEED LIMITS OR MATCH DESIGN SPEED DETERMINED FROM TxDOT ROADWAY FUNCTIONAL CLASSIFICATION SPEED GUIDELINES, WHICHEVER IS GREATER.
- SUPRELEVATION TRANSITION LENGTHS WERE NOT DETAILED IN ROADWAY APPROACH DESIGN.
- SEE DRAWINGS CV-04-00300 TO CV-04-00308 FOR TYPICAL ROADWAY CROSS SECTIONS.
- ROADWAY DRAWINGS ARE NOT SHOWN ON PLAN AND PROFILE SHEETS. REFER TO ROADWAY PLAN SHEETS IN VOLUME 3 FOR ALL ROADWAY DETAILS.
- NOT ALL PRIVATE ROADS AND DRIVEWAYS ARE REPRESENTED ON THE RAIL PLAN AND PROFILE SHEETS. THE CLEARANCE ENVELOPES SHOWN ON THE RAIL PLAN AND PROFILE SHEETS REPRESENT THE CLEARANCE ENVELOPE FOR THE PROPOSED HSR TRAIN. CLEARANCE ENVELOPES DO NOT INCLUDE ROADWAY STRUCTURAL ELEMENTS.
- ROADWAY ELEVATIONS FOR ROADWAY OVER RAIL WAY CROSSING DO NOT REPRESENT THE PROPOSED ROADWAY ELEVATION BUT RATHER THE MINIMUM HEIGHT REQUIRED FOR CLEARANCES, INCLUDING ALLOWANCES FOR ROADWAY STRUCTURAL ELEMENTS. SEE FDEE REPORT FOR ADDITIONAL INFORMATION.
- ROADWAYS, TYPICAL SECTIONS ACCOUNT FOR THE NECESSARY SPACE TO CONSTRUCT TEMPORARY AND EMERGENCY RESPONSE ENTITIES WOULD BE UNDERTAKEN DURING FINAL DESIGN AND CONSTRUCTION TO ENSURE ACCESS DURING THE CONSTRUCTION PHASE.
- USE OF TxDOT RIGHT-OF-WAY FOR PERMANENT IMPROVEMENTS WILL REQUIRED THE APPROPRIATE APPROVAL FROM TxDOT.

TYPICAL SECTIONS NOTES:

- SECTIONS ILLUSTRATE TYPICAL REQUIREMENTS TO GUIDE CONCEPTUAL ENGINEERING DESIGN AND CONSTRUCTION. THE CONSTRUCTION REQUIREMENTS WOULD VARY BASED UPON LOCAL CONDITIONS AND GENERAL NATURE OF LIMIT OF DISTURBANCE WOULD VARY BASED UPON SUBSURFACE LINES AND NOTES.
- OFFSET BETWEEN INFRASTRUCTURE ELEMENTS SUCH AS DISTANCE BETWEEN EMBANKMENT, FENCES, DRAINAGE SWALE, ACCESS ROAD, ETC. WOULD VARY BASED ON LOCAL REQUIREMENTS AND SITE SPECIFIC CONDITIONS.
- TYPICAL ROADWAY DRAINAGE SYSTEM PROVIDED AS SHOWN IN TYPICAL SECTIONS. LOCATION SPECIFIC CONFIGURATION AND SIZE WOULD BE ADVANCED DURING MORE DETAILED DESIGN.
- LOCATION SPECIFIC CONDITIONS WOULD DICTATE FENCING REQUIREMENTS.
- EMBANKMENT HEIGHTS AND CUT DEPTHS VARY WITH SURROUNDING GRADE AND RAIL PROFILE ELEVATION.
- CRASH BARRIERS NOT SHOWN. LOCATION SPECIFIC CONDITIONS WILL DICTATE CRASH BARRIERS REQUIREMENTS TO ENSURE SAFETY AND TO SATISFY APPLICABLE REGULATORY REQUIREMENTS.
- SUBSURFACE GROUND IMPROVEMENTS ARE NOT SHOWN AND WILL BE BASED ON SITE SPECIFIC REQUIREMENTS.
- RAIL BED IT VALUES WITH SURROUNDING GRADE AND RAIL PROFILE. THE BOTTOM OF SUBBALLAST SHALL BE NO LESS THAN SET ABOVE 100 YEAR FLOODPLAIN.

UTILITIES NOTES:

- REFER TO THE FDEE REPORT FOR A LIST OF MAJOR UTILITY CROSSINGS, THEIR ASSUMED SIZE, AND ASSOCIATED LOCATIONS ALONG THE ALIGNMENT.
- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE ONLY AND ARE BASED ON INFORMATION RECEIVED. AS DOCUMENTED IN THE FINAL DRAFT CONCEPTUAL ENGINEERING REPORT.
- NO FIELD SURVEYS HAVE BEEN CONDUCTED TO LOCATE AND VERIFY UTILITY LOCATIONS.
- NOT ALL EXISTING UNDERGROUND UTILITIES HAVE BEEN SHOWN. REFER TO THE FDEE REPORT FOR MAJOR UTILITIES INCLUDED IN PROJECT MAPPING.
- LOD NOT SHOWN FOR UTILITIES THAT ARE NOT IMPACTED BY THE ALIGNMENT. ONLY MAJOR UTILITIES THAT ARE PROTECTED, RELOCATED OR ELEVATED ARE SHOWN ON THE PLAN AND PROFILE VIEW. REFER TO DRAWING NO. CIV-04-0100 FOR TYPICAL UTILITY CROSSING DETAILS. UTILITY LODS FOR FUTURE PROPOSED GROUNDWATER PITS TO PITS PITS ARE SHOWN.
- FOR PARALLEL TRANSMISSION LINE CROSSINGS OVER NEW ELEVATED ROADWAYS, A LOD IS SHOWN ON THE PLAN VIEW. REFER TO DRAWING NO. CIV-04-0400 FOR TYPICAL UTILITY CROSSING DETAILS.
- MANY UTILITY CONFLICTS ALONG THE HEMPS ROAD CORRIDOR IN HOUSTON WOULD BE RESOLVED BY RELOCATING ON ONE OR BOTH SIDES OF THE ROADWAY AS REQUIRED. ALL WORK WOULD BE COORDINATED WITH UTILITY PROVIDERS TO MINIMIZE IMPACTS AND COORDINATE WITH OTHER PLANNED UTILITY PROJECTS ALONG CORRIDOR.
- FOR UTILITY WORK REQUIRED BY UTILITY COMPANIES, EACH UTILITY OWNER WOULD DEVELOP THE NECESSARY PERMITS AND CONTRACTS WITH APPLICABLE DESIGN STANDARDS AND REGULATORY AGENCY REVIEW PROCESSES.

DRAINAGE NOTES:

- PROPOSED DETENTION BASIN LOCATIONS AND DIMENSIONS SHOWN ARE APPROXIMATE AND ARE INTENDED FOR PRELIMINARY PLANNING AND ENVIRONMENTAL IMPACT ANALYSES PURPOSES ONLY. SITE SPECIFIC CONFIGURATIONS WOULD BE DEVELOPED DURING FINAL DESIGN IN ACCORDANCE WITH APPLICABLE REQUIREMENTS.
- EXISTING CURBVERTS ARE NOT SHOWN.
- IN ACCORDANCE WITH APPLICABLE REQUIREMENTS, REFER TO TYPICAL SECTION DRAWINGS FOR PROPOSED CONSTRUCTIONS.
- EXISTING STORMWATER FACILITIES ARE NOT SHOWN.
- STORMWATER COMMISSION ON ENVIRONMENTAL QUALITY (CEQ) WATER QUALITY CRITERIA WOULD BE MET FOR STORMWATER RUNOFF AND PROTECTION OF EXISTING WATER RESOURCES.
- CONSTRUCTION OF THE RAIL WAY REQUIRE THE RECONFIGURATION OF PONDS OR STOCK TANKS IMMEDIATELY ADJACENT TO THE RAIL CORRIDOR. IN CASES WHERE THE CURRENT DESIGN NECESSITATES THE FULL RELOCATION OF THE POND IS NOT REQUIRED UNDER THE CURRENT DESIGN. ADDITIONAL LANDOWNER NEGOTIATIONS WILL BE REQUIRED TO DETERMINE LAND OWNER PREFERENCES.

STRUCTURES GENERAL NOTES:

- TYPICAL SECTIONS WERE DEVELOPED TO IDENTIFY GENERAL ARRANGEMENTS AND ALLOWANCES FOR STRUCTURAL ELEMENTS. TYPICAL SECTIONS WERE USED AS THE BASIS FOR DEVELOPMENT OF LOD FOR ENVIRONMENTAL ANALYSES.
- APPROXIMATE HSR VADUCT AND BRIDGE STRUCTURE LIMITS AND DEPTHS ARE SHOWN ON THE PROFILES TO SUPPORT ENVIRONMENTAL IMPACT ANALYSES. LIMITS OF STRUCTURES AND EMBANKMENTS WOULD BE REFINED DURING FINAL DESIGN.
- PLAN AND PROFILE DRAWINGS DO NOT SHOW LIMITS OF STRUCTURES IN PLAN VIEW. SITE SPECIFIC STRUCTURE LIMITS AND DEPTHS WOULD BE ADVANCED DURING MORE DETAILED DESIGN. APPLICABLE REQUIREMENTS, DESIGN OF FOUNDATIONS, ADJUSTMENTS, PILES, AND OTHER STRUCTURES WOULD BE DEVELOPED TO MITIGATE ANY IMPACTS IDENTIFIED THROUGH ENVIRONMENTAL ANALYSES.
- HSR PROFILE WAS DEVELOPED TO PROVIDE A MINIMUM 3 FT VERTICAL CLEAR DISTANCE FROM ESTIMATED 100-YEAR FLOOD LEVEL TO BRIDGE SOFFIT FOR RIVER AND FLOODPLAIN CROSSINGS. FINAL DESIGN WOULD BE DEVELOPED TO MEET OR EXCEED THIS REQUIREMENT.
- SPECIAL STRUCTURES WOULD BE REQUIRED TO MITIGATE IMPACTS OR ADDRESS UNIQUE SITE SPECIFIC CONDITIONS. SPECIAL STRUCTURES WOULD BE ADVANCED DURING MORE DETAILED DESIGN. PROFILE DRAWINGS IDENTIFY ADDITIONAL LOD EXPECTED FOR CONSTRUCTION STAGING AND WORKING AREAS FOR SPECIAL STRUCTURES.

SYSTEMS GENERAL NOTES:

- SYSTEMS SCHEMATICS SHOWN ON SHEETS SYS-04-0010 THROUGH SYS-04-0015 SHOW LOCATIONS OF SYSTEMS FACILITIES THAT HAVE BEEN INCLUDED FOR EACH ENO-TEND ALTERNATIVE.
- AREA FOR SYSTEMS FACILITY SITES HAVE BEEN INCLUDED WITHIN THE PROJECT LOD. THESE AREAS ARE GENERALLY CALLED OUT AS "RAIL SYSTEMS SITES" ON THE PLAN AND PROFILE SHEETS. REFER TO FDEE REPORT TO DETERMINE THE "RAIL SYSTEMS FACILITY TYPE" AT EACH INDIVIDUAL LOCATION.
- TYPICAL LAYOUT PLANS FOR EACH OF THE SYSTEMS FACILITIES ARE INCLUDED IN SHEETS SYS-04-0100 THROUGH SYS-04-0102.
- LOD DEVELOPED FOR ENVIRONMENTAL IMPACT ANALYSES OF SYSTEMS SITES INCLUDED SPACE FOR A DRIVEWAY AND SPACE TO PARK A LIMITED NUMBER OF MAINTENANCE VEHICLES.
- SYSTEMS BUILDINGS WOULD BE DETAILED DURING FINAL DESIGN TO CONSIDER SITE SPECIFIC CONDITIONS, BE CONTEXT SENSITIVE, AND MINIMIZE VISUAL IMPACT. THE RADIO MAST A COMMUNICATION FACILITIES WOULD BE APPROXIMATELY 15 FT (5M) ABOVE THE TOP OF RAIL ELEVATION.
- TPSS WOULD BE CONNECTED TO THE NEAREST 38KV TRANSMISSION LINES DESIGNED BY UTILITY PROVIDER AND SUBJECT TO ENVIRONMENTAL REVIEW.

FACILITY NOTES:

- PROPOSED USE FACILITIES WOULD INCLUDE STATIONS AND ASSOCIATED PARKING GARAGES. MAINTENANCE OF WAY (MOW) FACILITIES, TRAINSET MAINTENANCE FACILITIES (TMF), AND RAILWAY SYSTEMS SITES, INCLUDING TRACTION POWER SUPPLY FACILITIES, SIGNAL HOUSES, AND PROPOSED FACILITIES ARE FOR PRELIMINARY PLANNING PURPOSES ONLY.
- ALL FACILITIES WOULD BE POWERED FROM THE LOCAL UTILITY GRID.
- ACCESS SECURITY, AND UTILITY PROVISION REQUIREMENTS FOR ALL FACILITIES WOULD BE DETAILED DURING FINAL DESIGN.

CONSTRUCTION CONSIDERATION NOTES:

- CONSTRUCTION REQUIREMENTS WERE CONSIDERED DURING DESIGN OF THE CONCEPTUAL ENGINEERING AND ARE DOCUMENTED IN THE PROJECT CONSTRUCTIONABILITY REPORT.
- TRIPS BY CONTRACTOR AND AREA REQUIRED FOR CONSTRUCTION PURPOSES, CONSTRUCTION STAGING, AND CONSTRUCTION FACILITIES WERE IDENTIFIED THROUGH DEVELOPMENT OF THE CONCEPTUAL ENGINEERING. CONSTRUCTION STAGING AREAS AND PRECAST FACILITIES ARE INCLUDED IN THE PROJECT LOD.
- SPECIAL STRUCTURES REQUIRED TO MITIGATE IMPACTS OR ADDRESS UNIQUE SITE SPECIFIC ISSUES SUCH AS LONG SPANS, CROSSOVER STRUCTURES, AND STABLE BEDS ARE IDENTIFIED IN THE CONSTRUCTIONABILITY REPORT.
- MEASURES REQUIRED TO MITIGATE NOISE, TRAFFIC, AND OTHER ENVIRONMENTAL IMPACTS WOULD BE IDENTIFIED THROUGH ENVIRONMENTAL ANALYSES. MORE DETAILED DESIGN INCLUDING DEVELOPMENT OF PERMITS AND CONTRACTS WITH APPLICABLE DESIGN STANDARDS AND REGULATORY AGENCY REVIEW WOULD BE REQUIRED TO SECURE APPLICABLE PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION WORKS.

DESIGNED BY	D. THOMPSON
CHECKED BY	R. BURNS
IN CHARGE	C. TAYLOR
DATE	09/15/2017

REV	DATE	BY	CHK	APP	DESCRIPTION

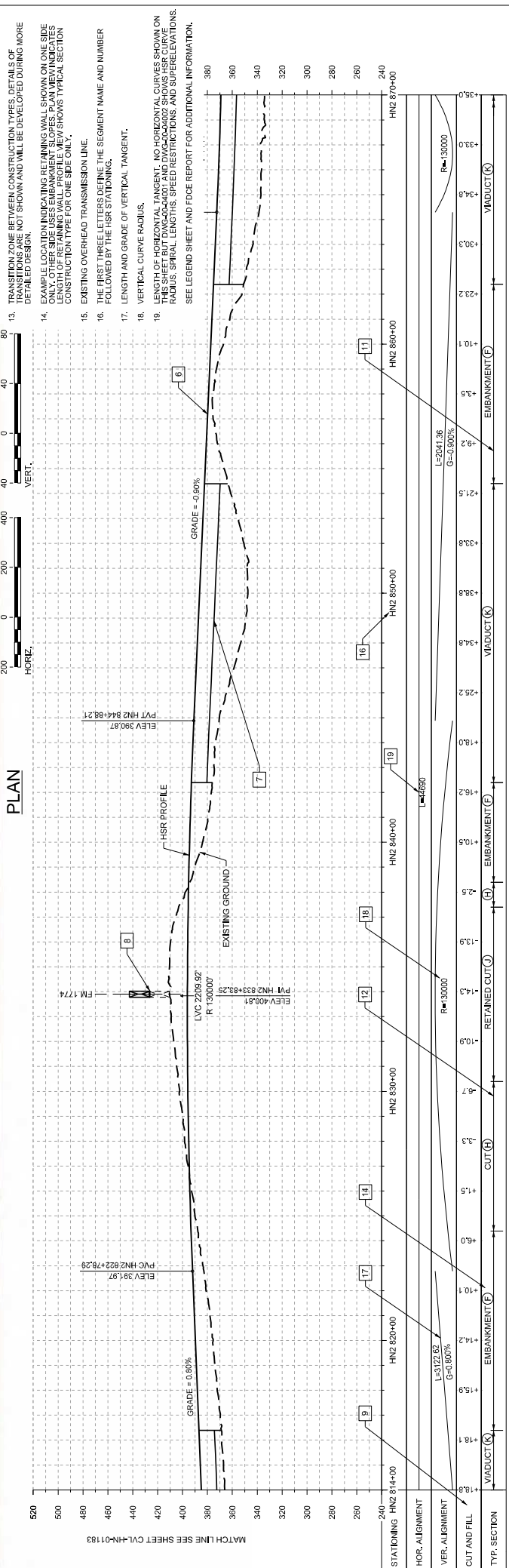
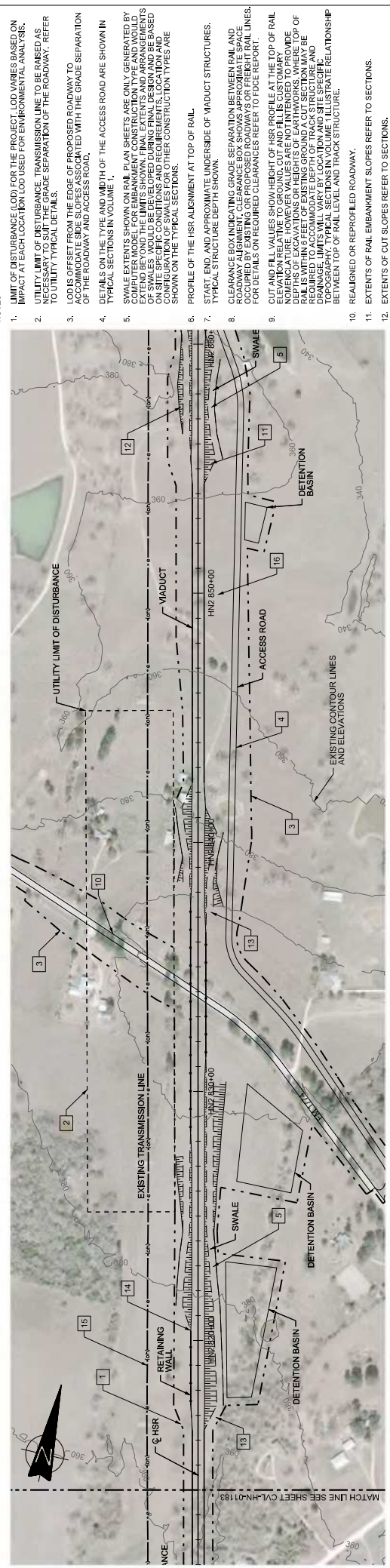
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Client: **TEXAS CENTRAL**  
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215  
 Drawing Title: **GENERAL NOTES**  
 Scale: **NO SCALE**  
 Drawing No: **234180**  
 Job No: **GEN-00-00008**  
 Date: **01**







- NOTES:
- LIMIT OF DISTURBANCE (LOD) FOR THE PROJECT, LOD VARIES BASED ON IMPACT AT EACH LOCATION USED FOR ENVIRONMENTAL ANALYSIS.
  - UTILITY LIMIT OF DISTURBANCE, TRANSMISSION LINE TO BE RAISED AS NECESSARY TO SUIT THE GRADE SEPARATION OF THE ROADWAY. REFER TO UTILITY TYPICAL DETAILS.
  - LOD IS OFFSET FROM THE EDGE OF PROPOSED ROADWAY TO THE CENTERLINE OF THE ROADWAY AND ACCESS ROAD.
  - DETAILS ON THE TYPE AND WIDTH OF THE ACCESS ROAD ARE SHOWN IN TYPICAL SECTIONS IN VOLUME 1.
  - SWALE EXTENTS SHOWN ON RAIL PLAN SHEETS ARE ONLY GENERATED BY COMPUTER MODEL FOR EMBANKMENT CONSTRUCTION TYPE AND WOULD EXTEND BEYOND THE LIMITS SHOWN. FINAL EXTENTS AND ARRANGEMENTS ON SITE SPECIFIC CONDITIONS AND REQUIREMENTS. LOCATION AND CONFIGURATION OF SWALES FOR OTHER CONSTRUCTION TYPES ARE SHOWN ON THE TYPICAL SECTIONS.
  - PROFILE OF THE HSR ALIGNMENT AT TOP OF RAIL.
  - START, END AND APPROXIMATE UNDERSIDE OF VADUCT STRUCTURES.
  - TYPICAL STRUCTURE DEPTH SHOWN.
  - CLEARANCE BOX INDICATING GRADE SEPARATION BETWEEN RAIL AND ROADWAY ALIGNMENT. CLEARANCE BOX SHOWS APPROXIMATE SPACE FOR DETAILS ON REQUIRED CLEARANCES REFER TO FACE REPORT.
  - CUT AND FILL VALUES SHOWN AS PER PROFILE AT THE TOP OF RAIL ELEVATION RELATIVE TO GROUND, CUT AND FILL IS CUSTOMARY NOMENCLATURE. HOWEVER VALUES ARE NOT INTENDED TO PROVIDE BASIS WITHIN FEET OF EXISTING GROUND. A CUT SECTION MAY BE REQUIRED TO ACCOMMODATE DEPTH OF TRACK STRUCTURE AND TO PROVIDE TYPICAL SECTIONS IN VOLUME 1. ILLUSTRATE RELATIONSHIP BETWEEN TOP OF RAIL LEVEL AND TRACK STRUCTURE.
  - REALIGNED OR REPROFILED ROADWAY.
  - EXTENTS OF RAIL EMBANKMENT SLOPES REFER TO SECTIONS.
  - EXTENTS OF CUT SLOPES REFER TO SECTIONS.
  - TRANSITION ZONE BETWEEN CONSTRUCTION TYPES, DETAILS OF TRANSITIONS ARE NOT SHOWN AND WILL BE DEVELOPED DURING MORE DETAILED DESIGN.
  - EXAMPLE LOCATION INDICATING RETAINING WALL SHOWN ON ONE SIDE ONLY. OTHER SIDE USES EMBANKMENT SLOPES. PLAN VIEW INDICATES CONSTRUCTION TYPE FOR ONE SIDE ONLY.
  - EXISTING OVERHEAD TRANSMISSION LINE.
  - THE FIRST THREE LETTERS DEFINE THE SEGMENT NAME AND NUMBER FOLLOWED BY THE HSR STATIONING.
  - LENGTH AND GRADE OF VERTICAL TANGENT.
  - VERTICAL CURVE RADIUS.
  - LENGTH OF HORIZONTAL TANGENT. NO HORIZONTAL CURVES SHOWN ON THIS SHEET BUT DVG=00+0001 AND DVG=00+0002 SHOWS HSR CURVE RADIUS, SPIRAL LENGTHS, SPEED RESTRICTIONS, AND SUPERELEVATIONS.

SEE LEGEND SHEET FOR ADDITIONAL INFORMATION.

ARUP

GENERAL  
RAIL ANNOTATION TO  
CLARIFY DESIGN INTENT

Client: **TEXAS CENTRAL**  
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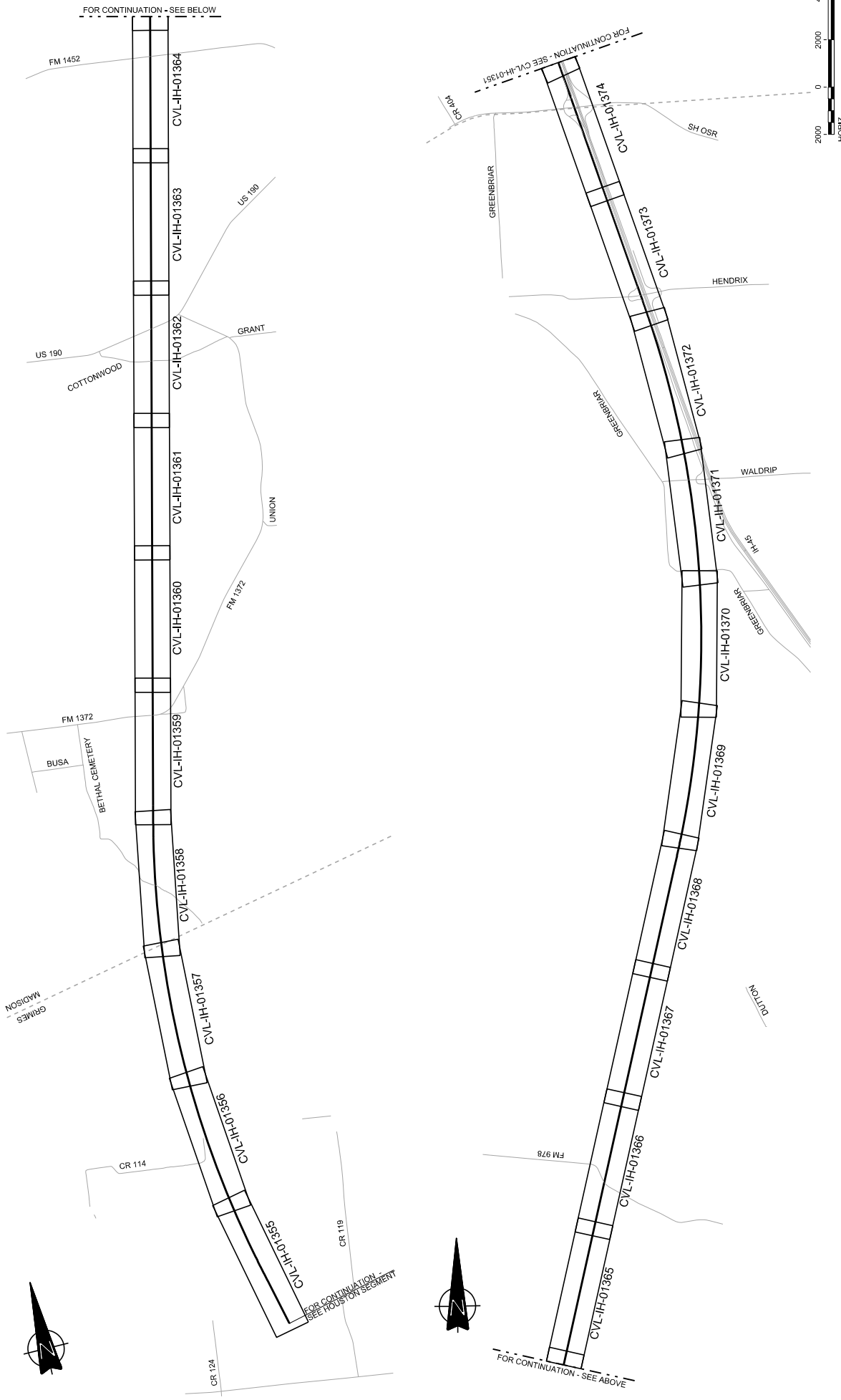
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Job No: GEN-00-00010  
Date: 01

DESIGNED BY: J. ENRIQUEZ  
CHECKED BY: P. TONKIN  
DESIGNED BY: R. BURNS  
CHECKED BY: C. TAYLOR  
DATE: 09/15/2017  
DISCIPLINE: BRIDGE/EN

REV: \_\_\_\_\_ DATE: \_\_\_\_\_ BY: \_\_\_\_\_ CHK: \_\_\_\_\_ APP: \_\_\_\_\_

FINAL DRAFT

# 2-3 IH-45 SEGMENT



DESIGNED BY <b>F. DAGRIN</b>	DATE 09/15/2017
CHECKED BY <b>R. GIBBINS</b>	BY CHK
DRAWN BY <b>K. SEYMOUR</b>	DATE
IN CHARGE <b>C. TAYLOR</b>	APP
DESCRIPTION	

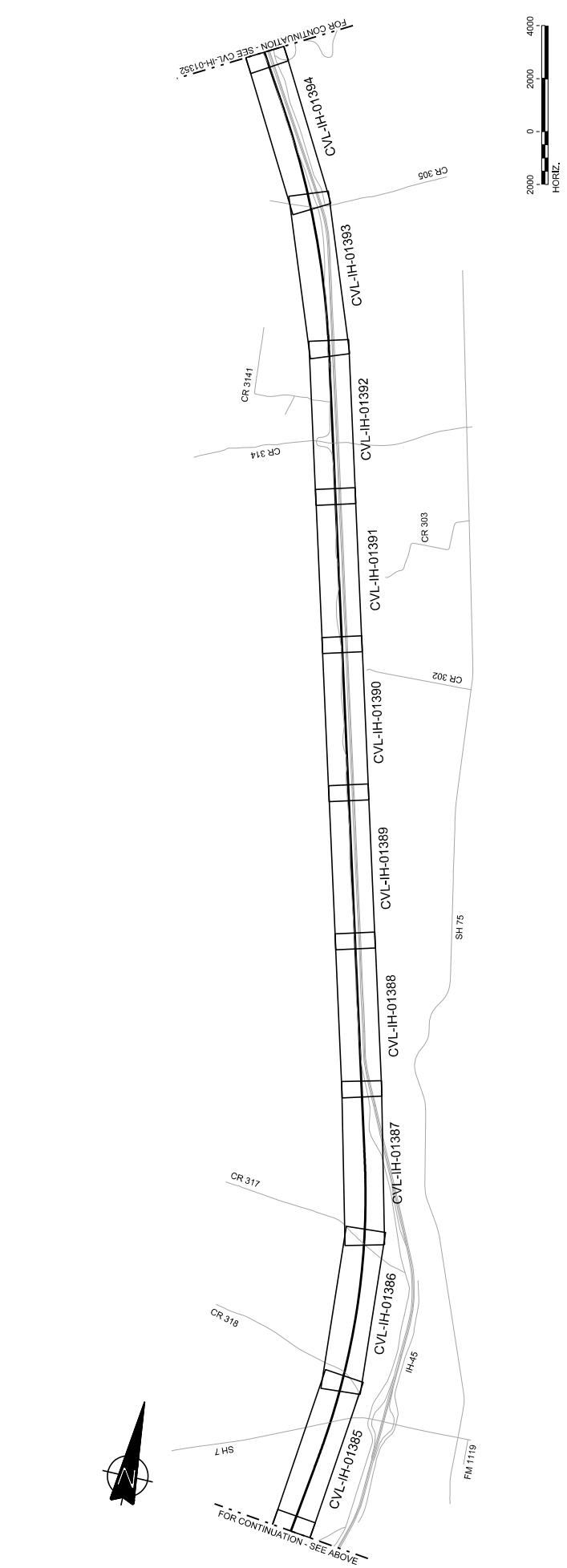
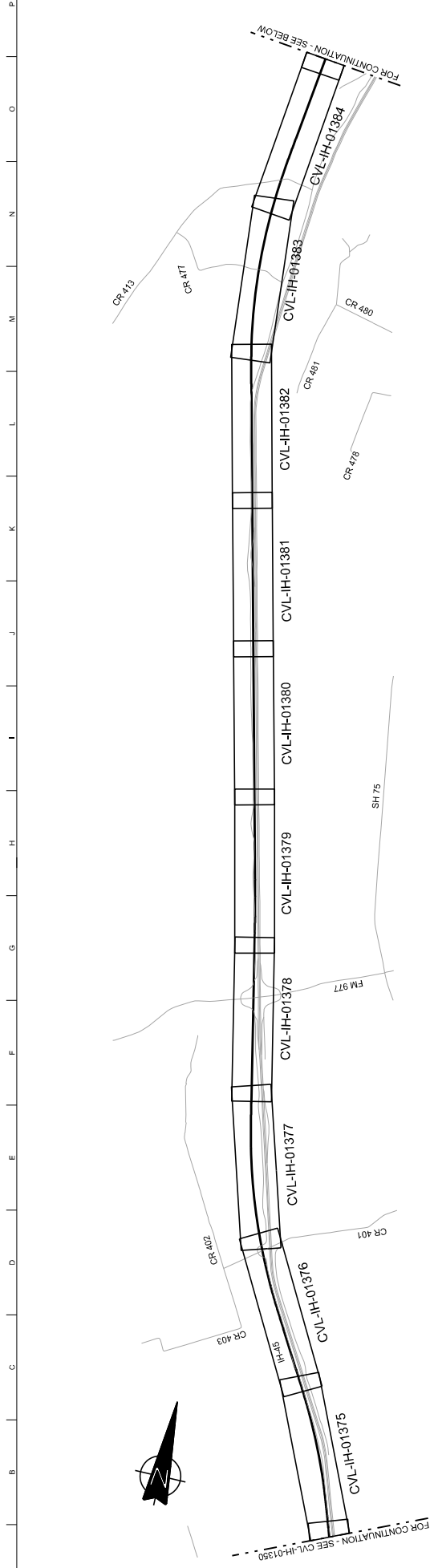
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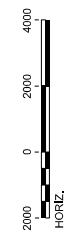
Drawing Title  
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 KEY MAP - SHEET 1 OF 5  
 IH1 10+00 TO IH1 1130+00

Scale: **AS SHOWN**  
 Drawing Status: **FINAL DRAFT**  
 Job No: **234180**  
 Drawing No: **CVL-IH-01350**  
 Rev: **01**



FOR CONTINUATION - SEE BELOW

FOR CONTINUATION - SEE ABOVE



REV	DATE	BY	CHK	APP
DISCIPLINE				
F. DAGRIN				
R. GIBBINS				
K. SEYMOUR				
C. TAYLOR				
09/15/2017				

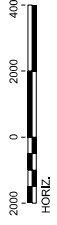
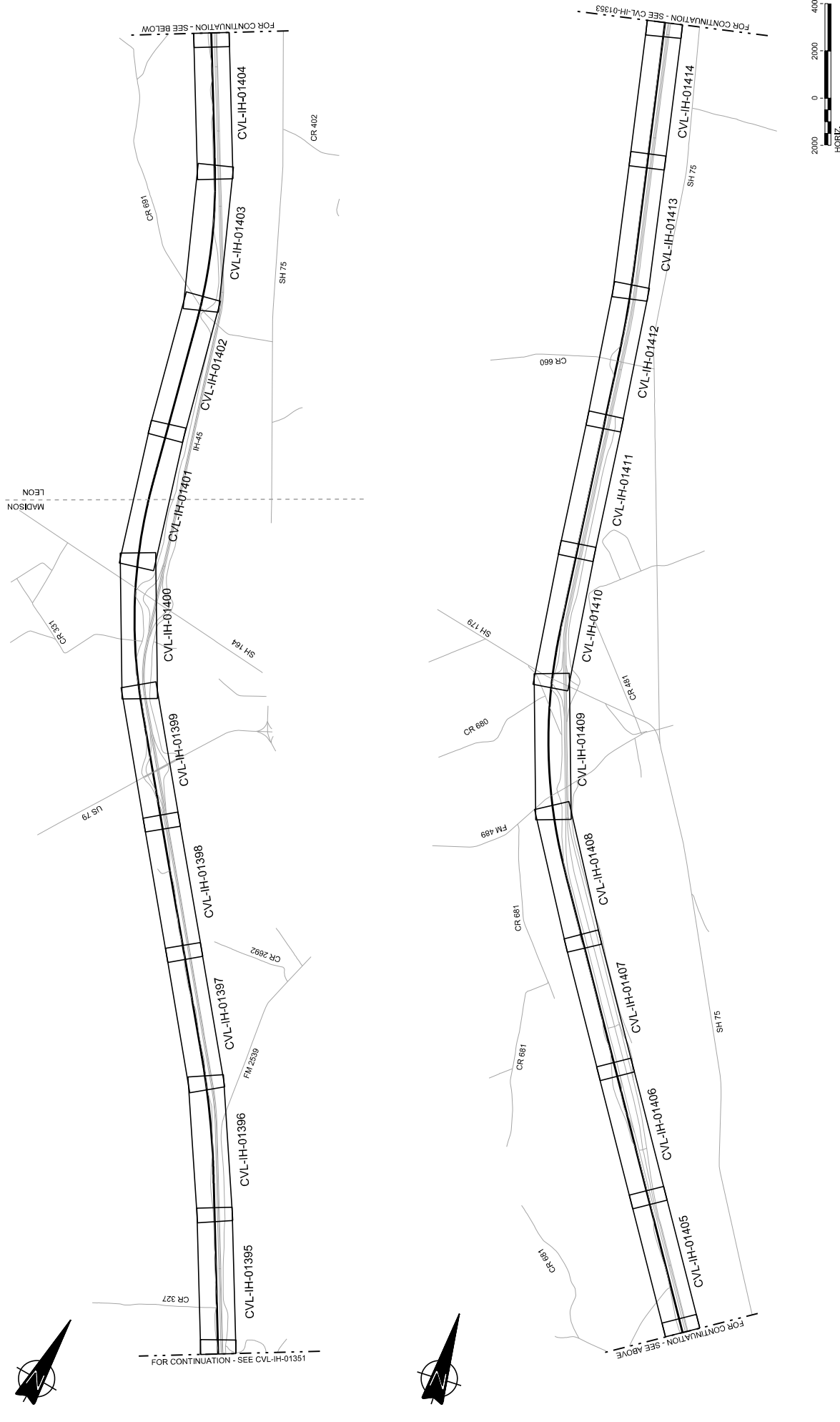
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Client: **TEXAS CENTRAL**  
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Drawing Title: **IH (45) SEGMENT CIVIL**  
 KEY MAP - SHEET 2 OF 5  
 IH1 1130+00 TO IH1 2250+00

Sheet: **AS SHOWN**  
 Drawing Status: **FINAL DRAFT**  
 Job No: **234180**  
 Drawing No: **CVL-IH-01351**  
 Rev: **01**

Drawn By: **AS SHOWN**  
 Checked By: **AS SHOWN**  
 Design: **AS SHOWN**  
 Final: **AS SHOWN**



REV	DATE	BY	CHK	APP	DISCRIPTION

DESIGNED BY  
**F. DAGRIN**

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**R. GIBBINS**

IN CHARGE  
**K. SEYMOUR**

DATE  
**C. TAYLOR**

09/15/2017

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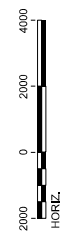
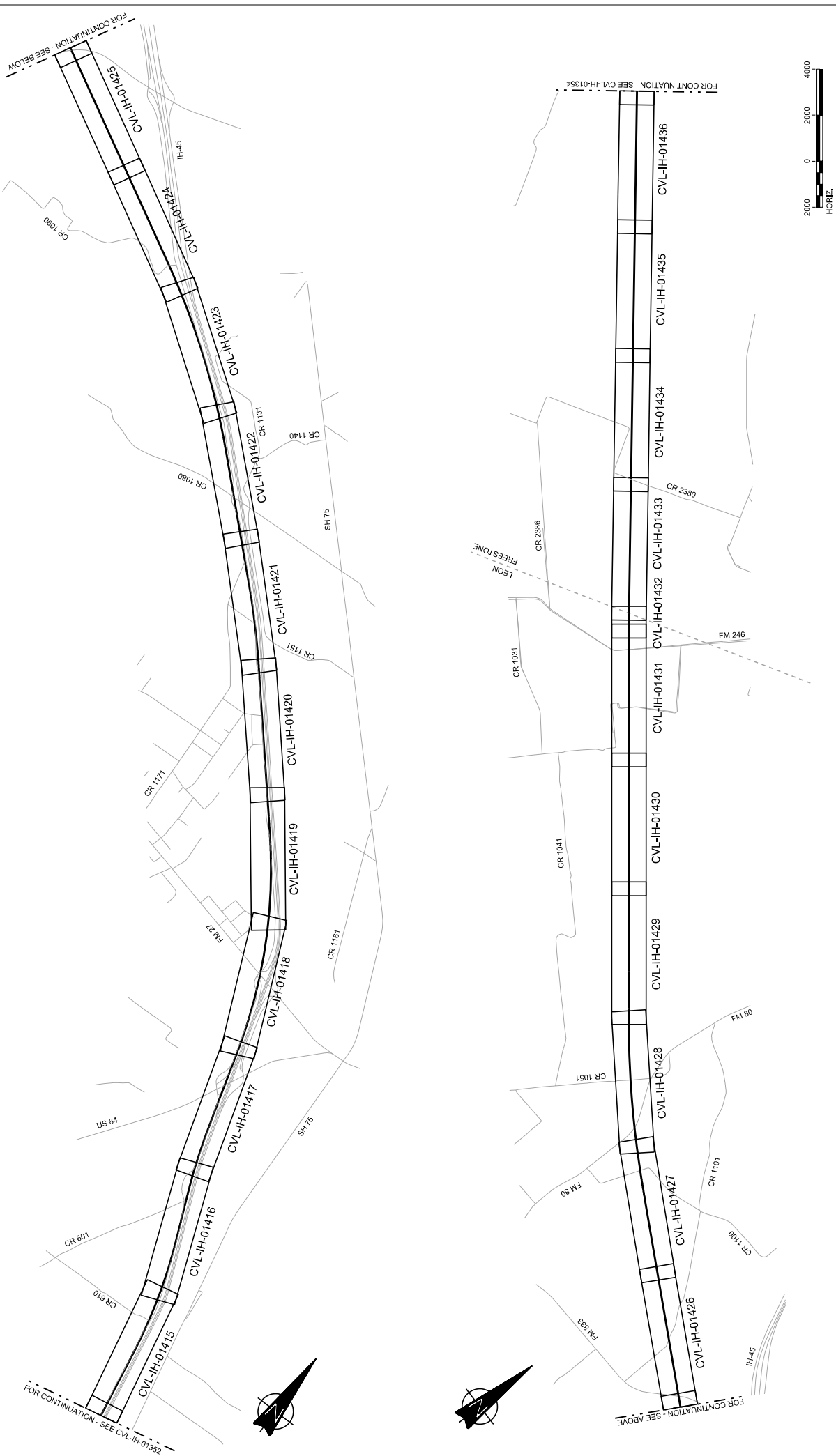
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 IH1 2250+00 TO IH1 3370+00

Scale  
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 Drawing Status  
**FINAL DRAFT**

Job No.  
 234180

Drawn By  
 CVL-IH-01352

Rev  
 01



REV	DATE	BY	CHK	APP	DISCRIPTION

DESIGNED BY  
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CHECKED BY  
**R. GIBBINS**

IN CHARGE  
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DATE  
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09/15/2017

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Drawing Title  
**IH (45) SEGMENT  
CIVIL  
KEY MAP - SHEET 4 OF 5  
IH1 3370+00 TO IH2 234+00**

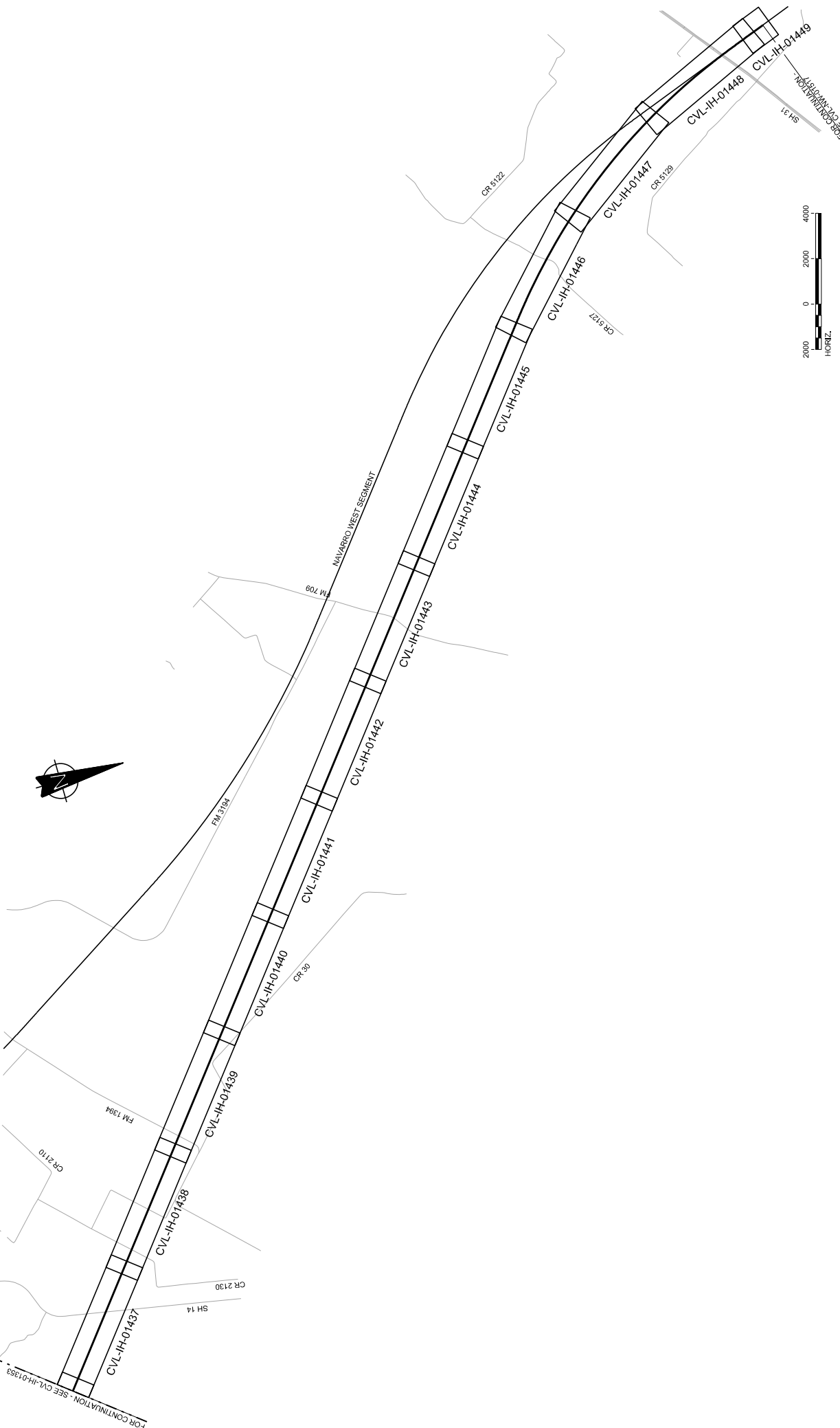
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Contract No.  
**234180**

Sheet No.  
**01**

Drawing No.  
**CVL-IH-01353**

Final Draft  
**FINAL DRAFT**

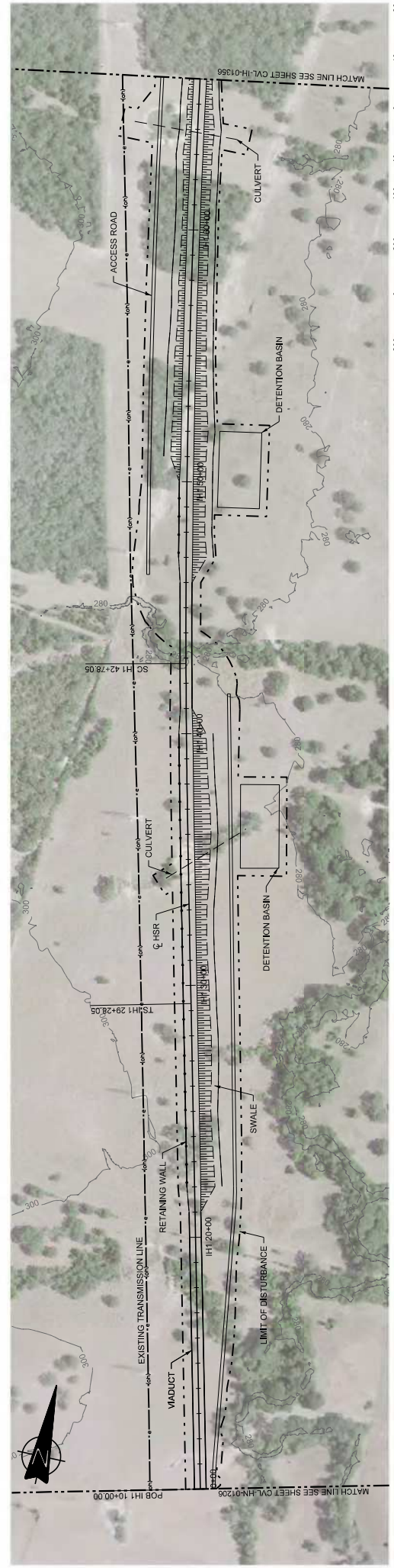


<p>DESIGNED BY <b>F. DAGRIN</b></p>		<p>DATE <b>09/15/2017</b></p>
<p>CHECKED BY <b>R. GIBBINS</b></p>		
<p>DESIGNED BY <b>K. SEYMOUR</b></p>		<p>DATE <b>09/15/2017</b></p>
<p>CHECKED BY <b>C. TAYLOR</b></p>		
<p>DESCRIPTION <b>DISCIP: IEN</b></p>		

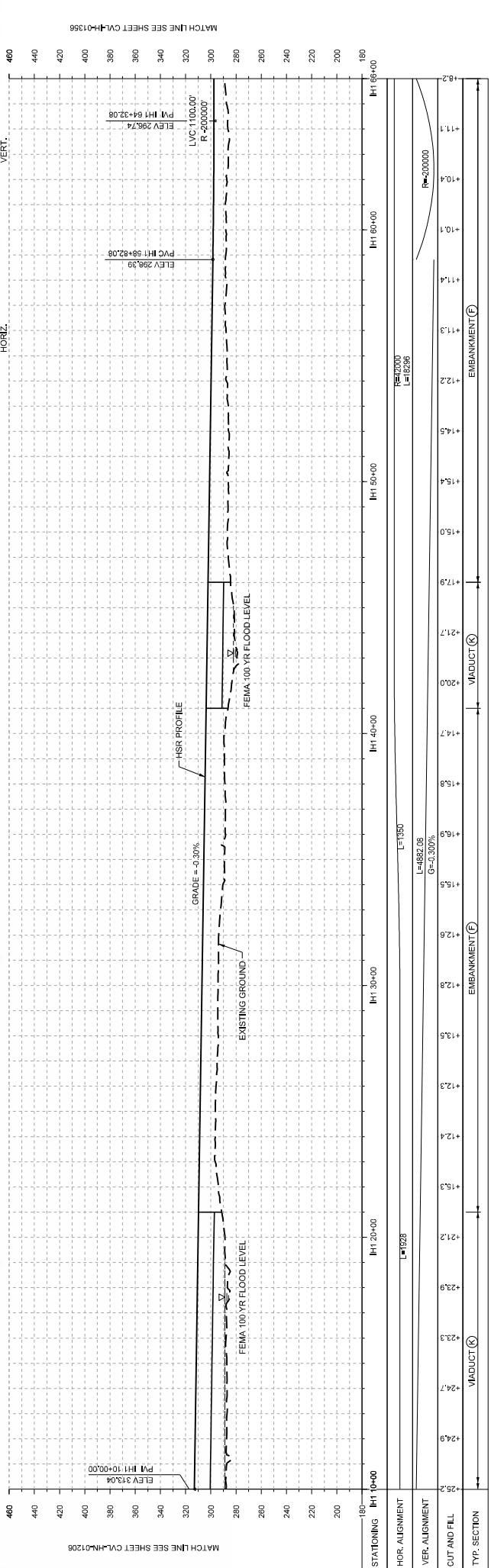
  

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PLAN



PROFILE

DESIGNED BY <b>F. DAGRIN</b>	DATE 09/15/2017
CHECKED BY <b>R. GIBBINS</b>	BY CHK
DESIGNED BY <b>K. SEYMOUR</b>	DATE
CHECKED BY <b>C. TAYLOR</b>	DATE
DATE	DATE
BY	BY
CHK	CHK
APP	APP

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Client: **ARUP**

Contract No: **234180**

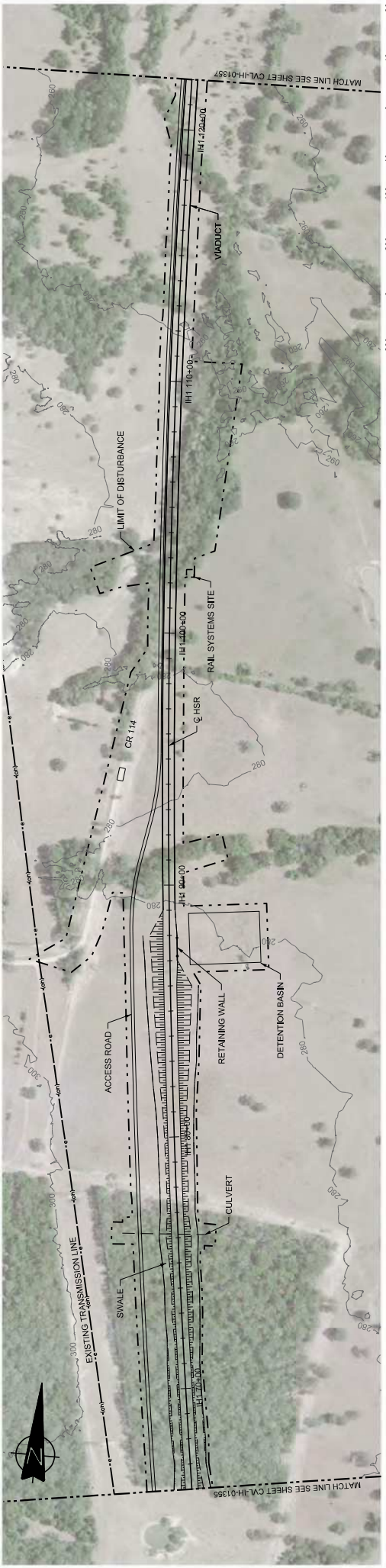
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Checked By: **01**

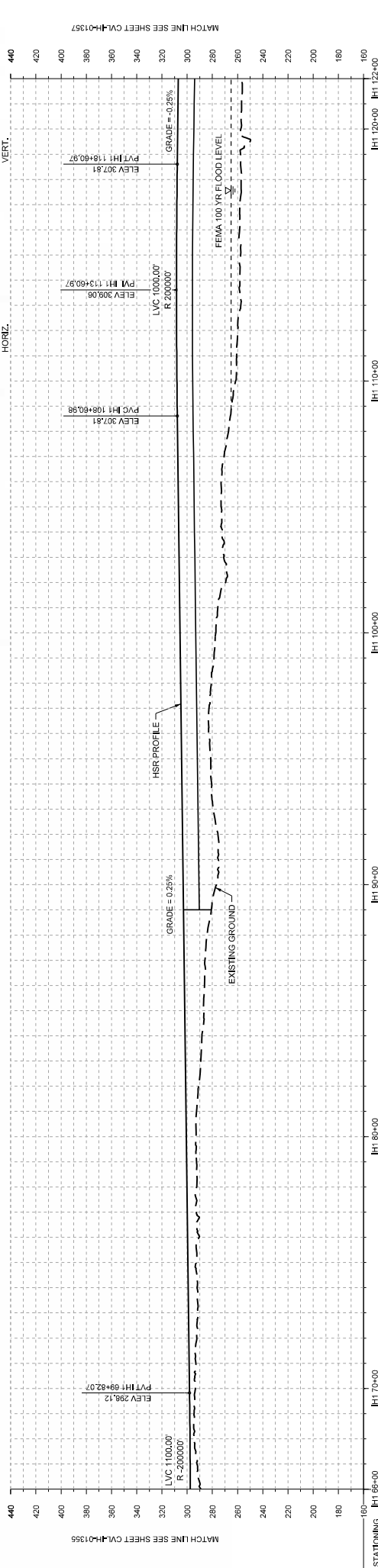
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Contract Status: **FINAL DRAFT**





**PLAN**



STATIONING	IH1 68+00	IH1 70+00	IH1 80+00	IH1 90+00	IH1 100+00	IH1 110+00	IH1 120+00	IH1 122+00
HOR. ALIGNMENT	P=20000 L=18236							
VER. ALIGNMENT	P=20000 L=3878.50 G=0.250%							
CUT AND FILL	P=20000 L=12624.04 G=-0.250%							
TYP. SECTION	EMBANKMENT (E)			VIADUCT (E)				

**PROFILE**

DESIGNED BY	F. DAGRIN
CHECKED BY	R. GIBBINS
DATE	09/15/2017
DRAWN BY	K. SEYMOUR
CHECKED BY	C. TAYLOR
DATE	09/15/2017
BY	CHK
APP	
REV	
DATE	
BY	
CHK	
APP	
DISCIPLINE	

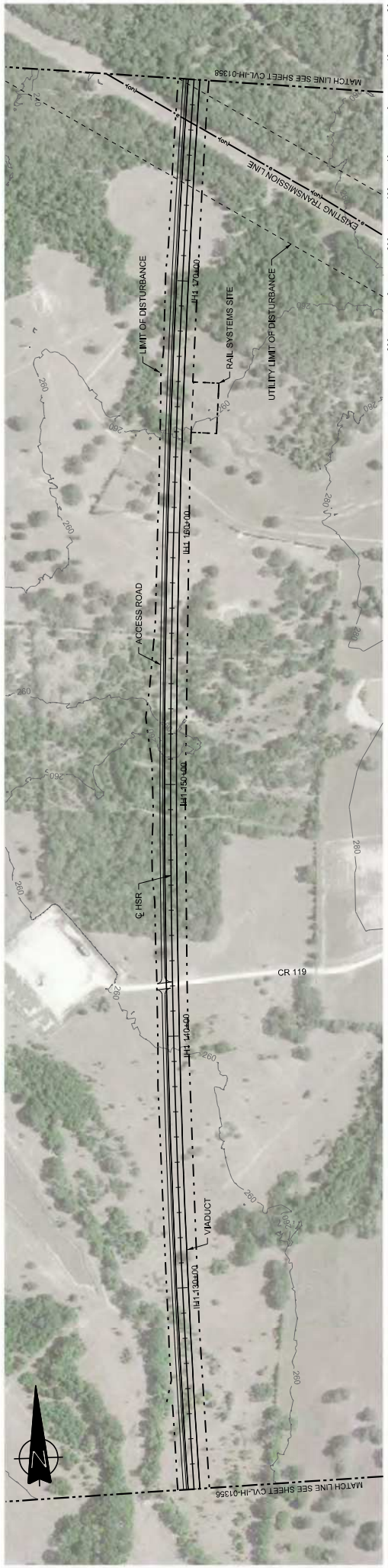
**ARUP**  
 1070 RHWIND AVENUE, SUITE 475  
 HOUSTON, TEXAS 77062, USA  
 www.arup.com  
 Tel: +1 281 541 1467  
 Texas Registered Engineering Firm #1980

Client

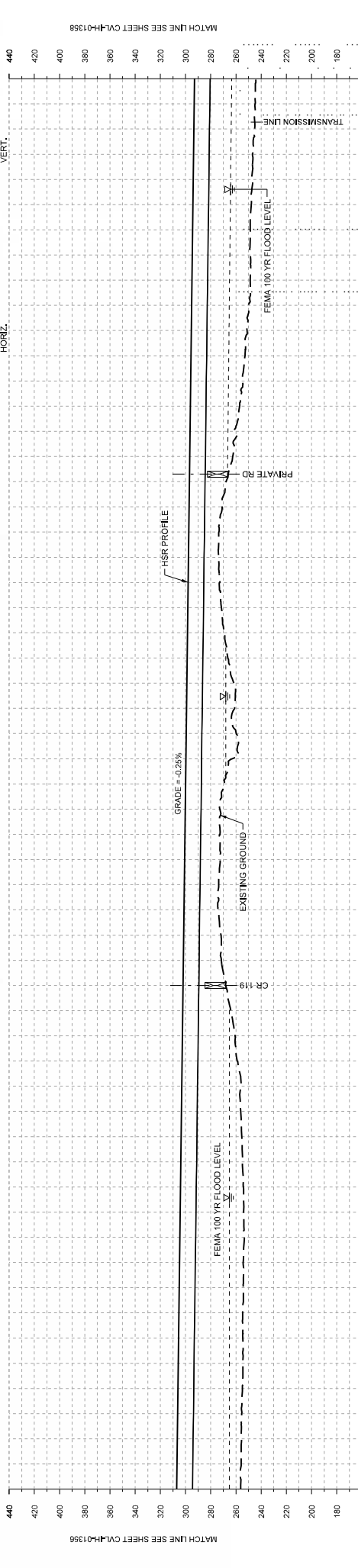
Submitted: AS SHOWN  
 Drawing Status: FINAL DRAFT  
 Job No: 234180  
 Drawing No: CVL-IH-01356  
 Rev: 01

IH (45) SEGMENT  
 CIVIL  
 PLAN AND PROFILE  
 IH1 66+00 TO IH1 122+00

Drawing Title



PLAN



STATIONING	IH1 122+00	IH1 130+00	IH1 140+00	IH1 150+00	IH1 160+00	IH1 170+00	IH1 178+00
HOR. ALIGNMENT	P=2.000 L=182.96						
VER. ALIGNMENT	L=1282.04 G=-0.250%						
CUT AND FILL	VIA DUCT (E)						
TYP. SECTION							

PROFILE

DESIGNED BY	F. DAGRIN			
CHECKED BY	R. GIBBINS			
IN CHARGE	K. SEYMOUR			
DATE	09/15/2017			
REV	DATE	BY	CHK	APP

**ARUP**  
 100 South Lamar Street, Suite 1022, Dallas, Texas 75215  
 2711 North Hazard Ave., Suite 3000  
 Dallas, Texas 75206  
 www.arup.com

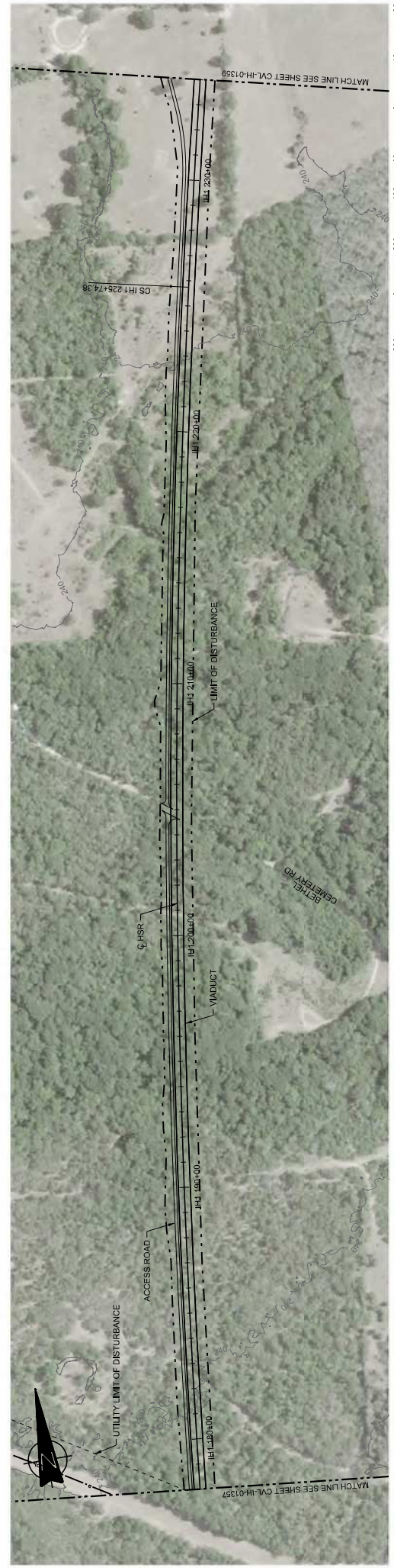
**FRESE NICHOLS**  
 2711 North Hazard Ave., Suite 3000  
 Dallas, Texas 75206  
 www.fresenichols.com

**TEXAS CENTRAL**  
 1400 South Lamar Street, Suite 1022, Dallas, Texas 75215

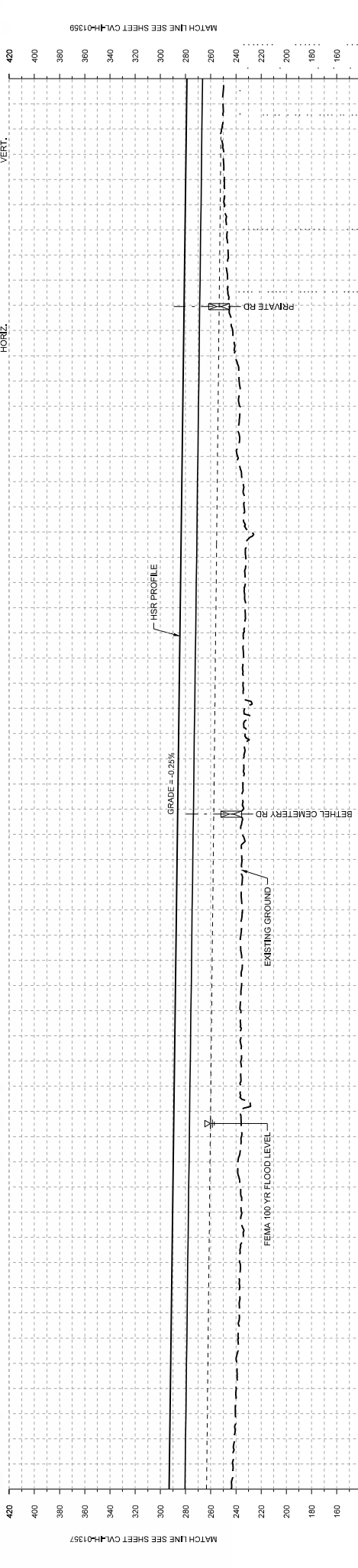
Client: **ARUP**  
 Drawing Title: **IH (45) SEGMENT CIVIL PLAN AND PROFILE IH1 122+00 TO IH1 178+00**

Scale: **AS SHOWN**  
 Drawing Status: **FINAL DRAFT**  
 Job No: **234180**  
 Drawing No: **CVL-IH-01357**  
 Rev: **01**





PLAN



STATIONING	IH1 178+00	IH1 180+00	IH1 190+00	IH1 200+00	IH1 210+00	IH1 220+00	IH1 230+00	IH1 234+00
HOR. ALIGNMENT	REV2000 L=18236							
VER. ALIGNMENT	L=12824.04 G=-0.250%							
CUT AND FILL	VADUCT							
TYP. SECTION								

PROFILE

DESIGNED BY	F. DAGRIN			
CHECKED BY	R. GIBBINS			
IN CHARGE	K. SEYMOUR			
DATE	C. TAYLOR			
REV	DATE	BY	CHK	APP

**ARUP**  
 100 South Lamar Street, Suite 1022, Dallas, Texas 75215  
 2711 North Howard Ave., Suite 3000  
 Houston, Texas 77062, USA  
 Tel: +1 214 774 1467  
 Fax: +1 214 774 2001  
 www.arup.com  
 Texas Registered Engineer #17968

**FRESE NICHOLS**  
 2711 North Howard Ave., Suite 3000  
 Houston, Texas 77062, USA  
 Tel: +1 214 774 1467  
 Fax: +1 214 774 2001  
 www.fresenichols.com  
 Texas Registered Engineer #17968

**TEXAS CENTRAL**  
 1400 South Lamar Street, Suite 1022, Dallas, Texas 75215

Client: **ARUP**

Contract Title: **IH (45) SEGMENT CIVIL PLAN AND PROFILE IH1 178+00 TO IH1 234+00**

Scale: **AS SHOWN**

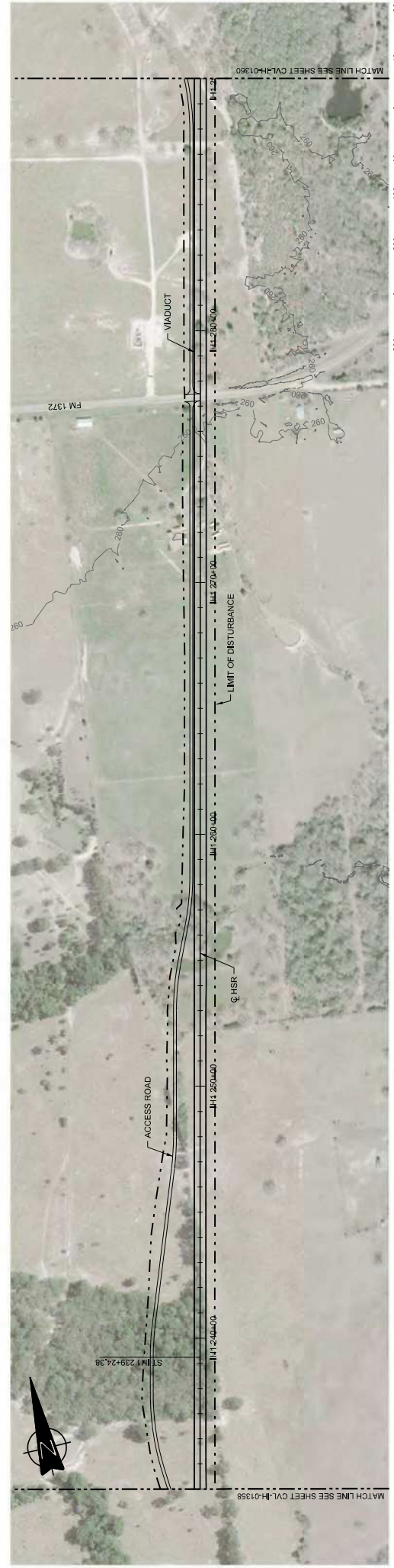
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Job No: **CVL-IH-01358**

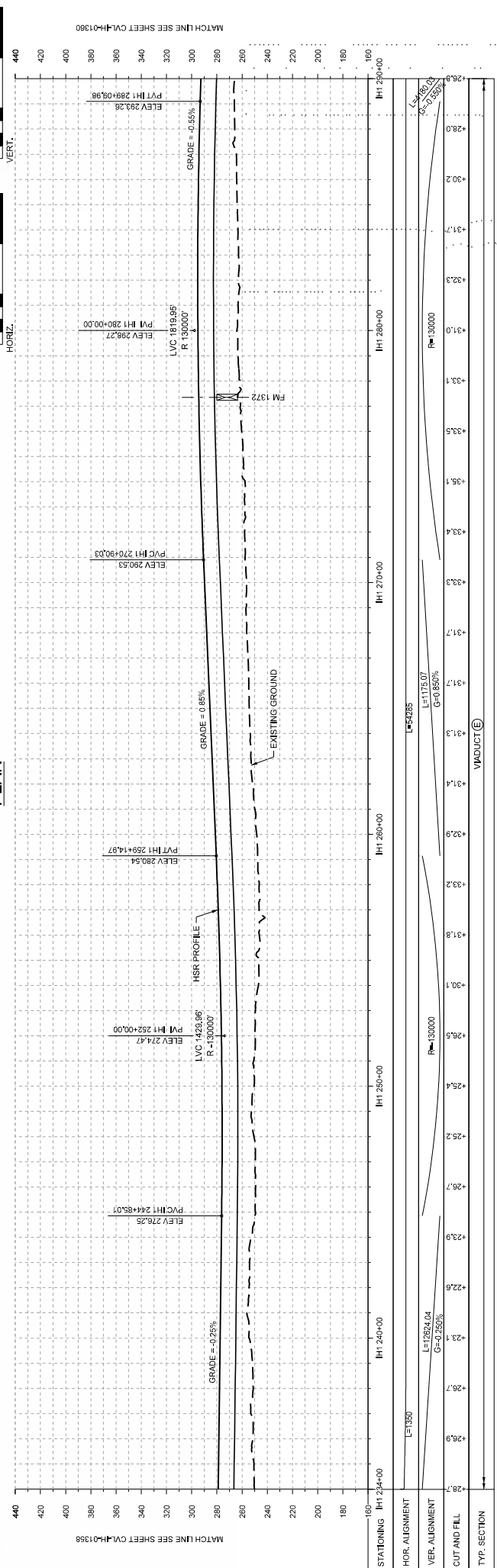
Drawn By: **01**

Checked By: **01**

Final Draft



PLAN



PROFILE

DESIGNED BY <b>F. DAGRIN</b>	DATE 09/15/2017
CHECKED BY <b>R. GIBBINS</b>	BY CHK
DESIGNED BY <b>K. SEYMOUR</b>	DATE
CHECKED BY <b>C. TAYLOR</b>	DATE
DESCRIPTION DISCIP: EN	APP

**ARUP**  
1070 RHWood Ave., Suite 475  
Houston, Texas 77062, USA  
www.arup.com

**FRESE NICHOLS**  
2711 North Island Ave., Suite 300  
Dallas, Texas 75238, USA  
www.fresenichols.com

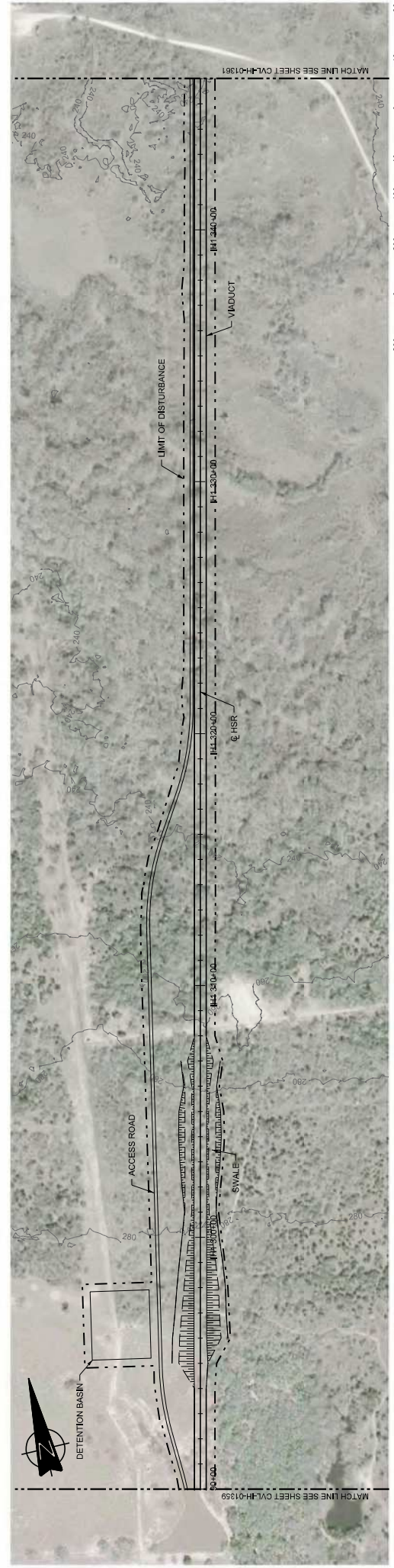
Client: **TEXAS CENTRAL**  
1400 South Lamar Street, Suite 1022, Dallas, Texas 75215

Scale: **AS SHOWN**  
Drawing Status: **FINAL DRAFT**

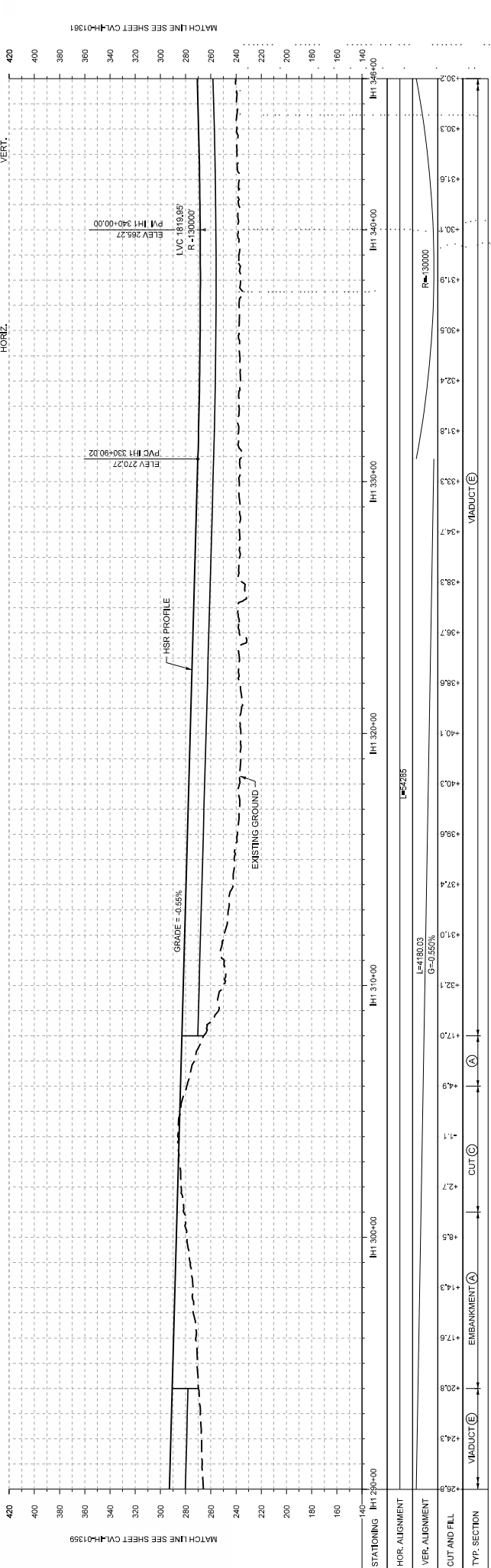
Job No: **234180**  
Drawing No: **CVL-IH-01399**

IH (45) SEGMENT  
CIVIL  
PLAN AND PROFILE  
IH1 234+00 TO IH1 290+00





PLAN



PROFILE

DESIGNED BY <b>F. DAGRIN</b>	CHECKED BY <b>R. GIBBINS</b>	DATE <b>09/15/2017</b>
CHECKED BY <b>K. SEYMOUR</b>	DATE <b>09/15/2017</b>	
IN CHARGE <b>C. TAYLOR</b>	DATE <b>09/15/2017</b>	
DATE <b>09/15/2017</b>	BY <b>CHK</b>	APP <b>APP</b>
REV	DATE	BY
		CHK
		APP

**ARUP**  
1070 RHWIND AVE., SUITE 475  
HOUSTON, TEXAS 77062, USA  
PH: (713) 843 1467  
WWW.ARUP.COM

**FRESE NICHOLS**  
2711 NORTH HIGHT AVE., SUITE 3000  
DALLAS, TEXAS 75206  
PH: (214) 312 2001  
WWW.FRESENIICHOLS.COM  
Texas Registered Engineer #17162-144

**TEXAS CENTRAL**  
1400 South Lamar Street, Suite 1022, Dallas, Texas 75215

Client: **ARUP**

Drawing Title: **IH (45) SEGMENT CIVIL PLAN AND PROFILE**

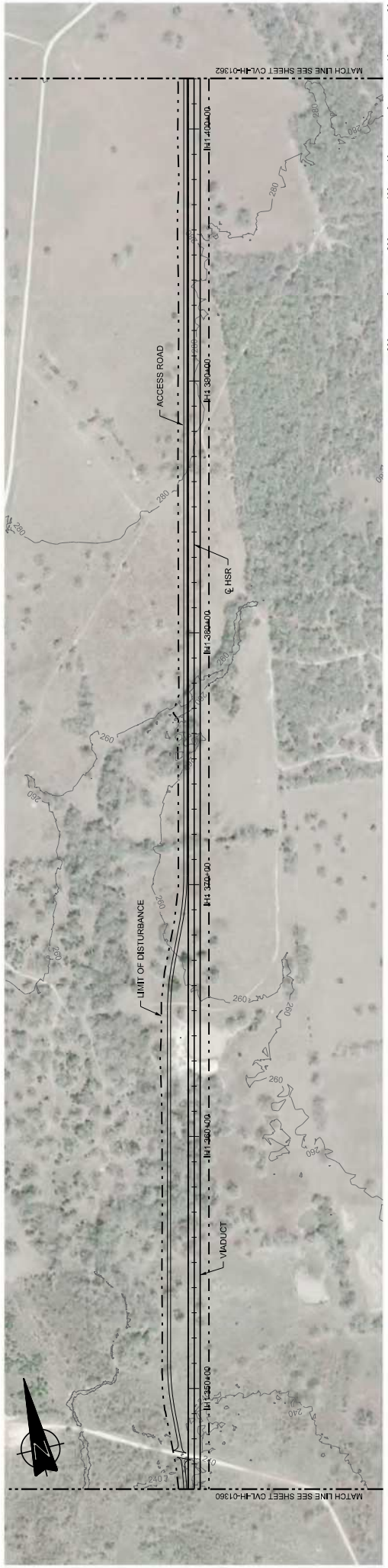
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Drawing No: **234180**

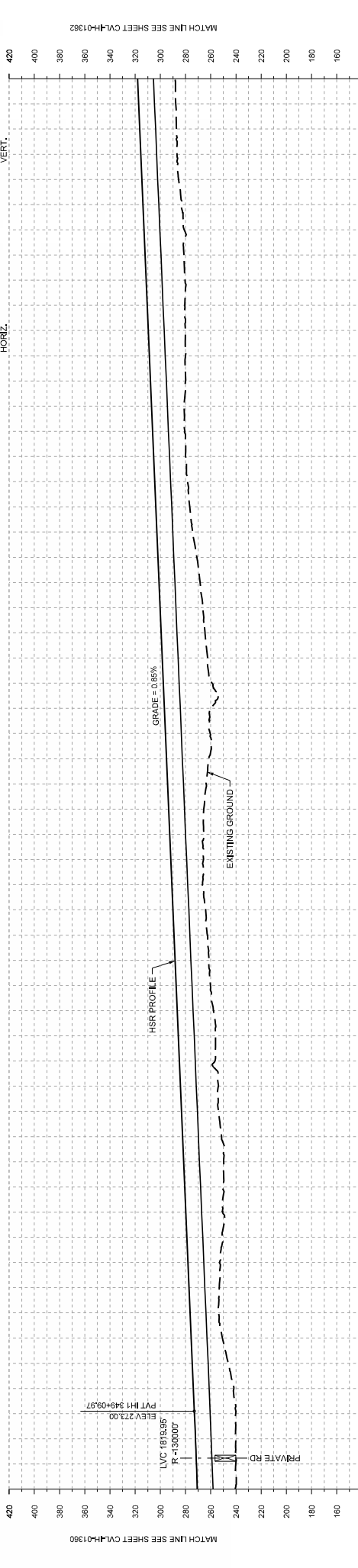
Job No: **CVL-IH-01360**

Sheet: **FINAL DRAFT**

Sheet Count: **01**



PLAN



REV	DATE	BY	CHK	APP
1	09/15/2017	DISCIP:RKN		

PROFILE

DESIGNED BY <b>F. DAGRIN</b>
CHECKED BY <b>R. GIBBINS</b>
IN CHARGE <b>K. SEYMOUR</b>
DATE <b>09/15/2017</b>

**ARUP**  
 1070 RHWIND AVENUE, SUITE 475  
 HOUSTON, TEXAS 77002, USA  
 www.arup.com

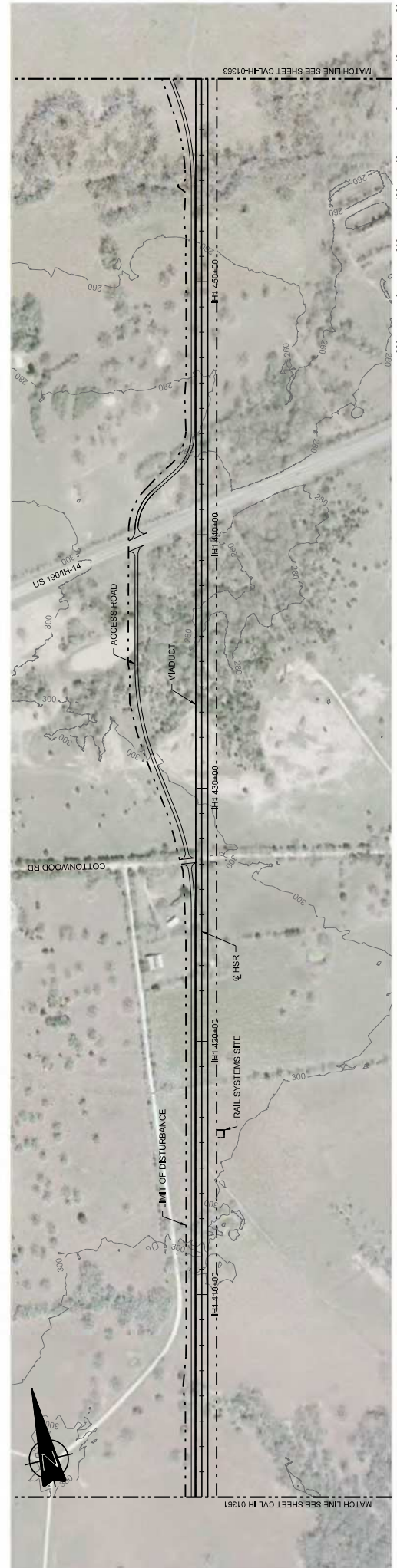
**FRESE NICHOLS**  
 2711 NORTH HAVEN AVENUE, SUITE 3000  
 DALLAS, TEXAS 75206  
 www.fresenichols.com

**TEXAS CENTRAL**  
 1408 South Lamar Street, Suite 1022, Dallas, Texas 75215

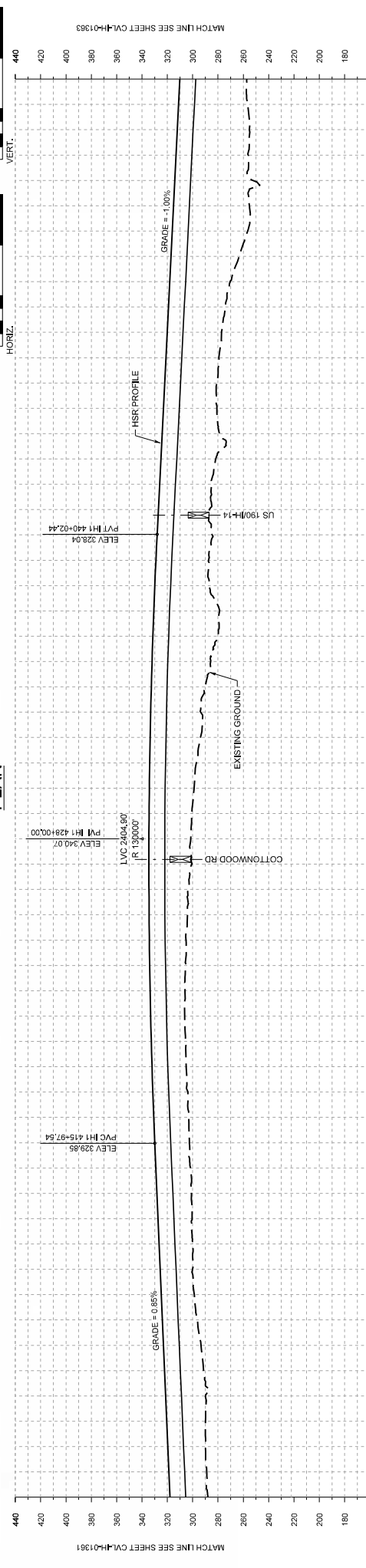
Client: **ARUP**  
 Drawing Title: **IH (45) SEGMENT CIVIL PLAN AND PROFILE**  
 Job No: **234180**

Scale: **AS SHOWN**  
 Drawing Status: **FINAL DRAFT**  
 Job No: **234180**  
 Drawing No: **CVL-IH-01361**  
 Rev: **01**





PLAN



STATIONING	IH1 402+00	IH1 410+00	IH1 420+00	IH1 430+00	IH1 440+00	IH1 450+00	IH1 458+00
HOR. ALIGNMENT	L=6667.59 G=0.850%						
VER. ALIGNMENT	L=3207.84 G=-1.000%						
CUT AND FILL	VINDUCT (E)						
TYP. SECTION	VINDUCT (E)						

PROFILE

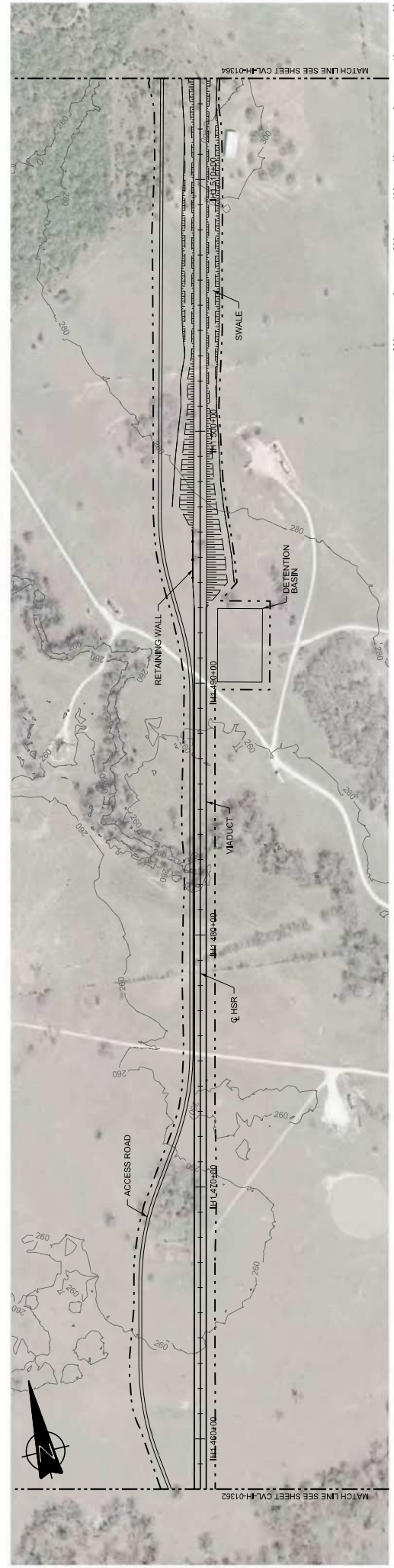
DESIGNED BY	F. DAGRIN
CHECKED BY	R. GIBBINS
IN CHARGE	K. SEYMOUR
DATE	C. TAYLOR
REV	09/15/2017
BY	CHK
APP	APP
DISCIP	EN

**ARUP**  
 1070 RHWIND AVENUE, SUITE 475  
 HOUSTON, TEXAS 77062, USA  
 www.arup.com Tel: (713) 443 1467  
 Texas Registered Engineering Firm F-1968

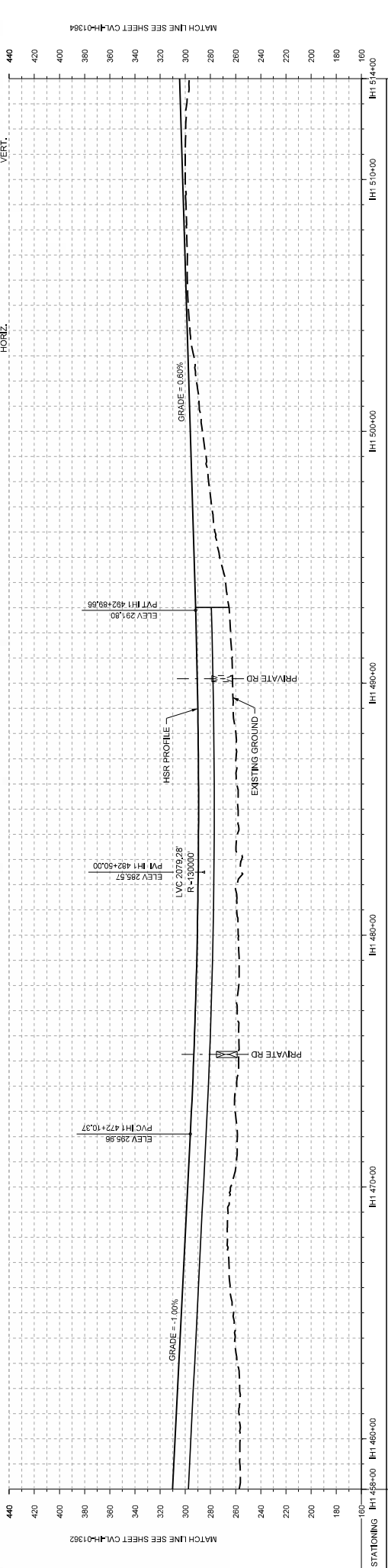
**FRESE NICHOLS**  
 2711 North Island Ave., Suite 3000  
 Dallas, Texas 75238  
 www.fresenichols.com Tel: (214) 371 2001  
 Texas Registered Engineering Firm F-5444

**TEXAS CENTRAL**  
 1408 South Lamar Street, Suite 1022, Dallas, Texas 75215

Scale: AS SHOWN  
 Drawing Status: FINAL DRAFT  
 Job No: 234180  
 Drawing No: CIVL-IH-01362  
 Rev: 01



PLAN



STATIONING	IH1 458+00	IH1 460+00	IH1 470+00	IH1 480+00	IH1 500+00	IH1 514+00
HOR. ALIGNMENT	L=5295					
VER. ALIGNMENT	L=3207.84 G=-1.000%					
CUT AND FILL	L=6023.46 G=0.000%					
TYP. SECTION	EMBANKMENT (A) CUT (C) VIADUCT (E)					

PROFILE

DESIGNED BY	F. DAGRIN
CHECKED BY	R. GIBBINS
IN CHARGE	K. SEYMOUR
DATE	C. TAYLOR
REV	09/15/2017

**ARUP**  
 10000 North Central Expressway, Suite 475  
 Houston, Texas 77062, USA  
 Tel: +1 281 443 1467  
 www.arup.com  
 Texas Registered Engineering Firm F-1980

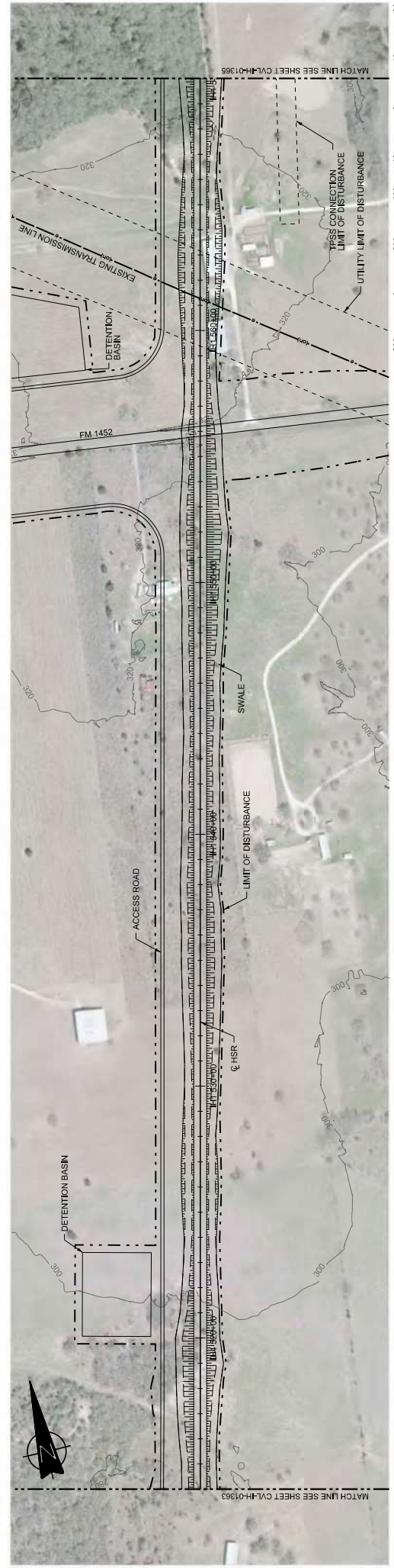
**FREES NICHOLS**  
 2711 North Highway Ave., Suite 3000  
 Dallas, Texas 75206  
 Tel: (214) 372 2001  
 Texas Registered Engineering Firm F-1044

**TEXAS CENTRAL**  
 1400 South Lamar Street, Suite 1022, Dallas, Texas 75215

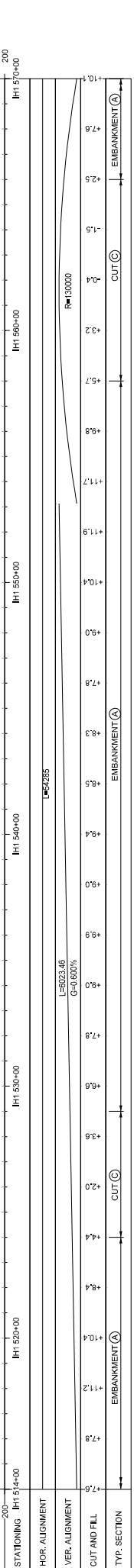
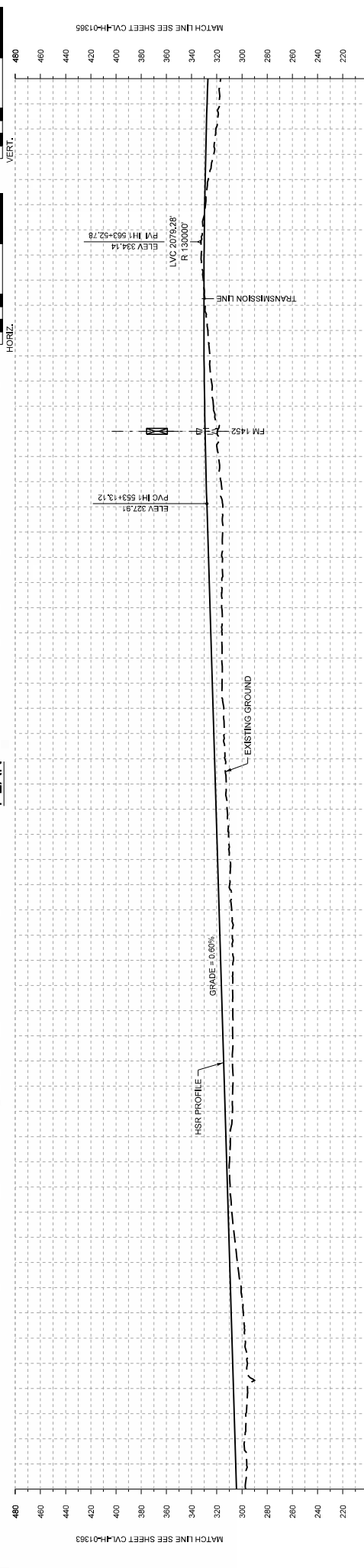
Client: **IH (45) SEGMENT CIVIL**  
**PLAN AND PROFILE**  
 IH1 458+00 TO IH1 514+00

Scale: **AS SHOWN**  
 Drawing Title: **FINAL DRAFT**  
 Job No: **234180**  
 Drawing No: **CVL-IH-01363**  
 Rev: **01**





PLAN



PL01 BY: N-FPMCS18 PL01 TIME: 9/22/2017 8:33:08 PM

MATCH LINE SEE SHEET CVL-IH-01363

MATCH LINE SEE SHEET CVL-IH-01364

PROFILE

DESIGNED BY	F. DAGRIN
CHECKED BY	R. GIBBINS
DESIGNED BY	K. SEYMOUR
CHECKED BY	C. TAYLOR
DATE	09/15/2017

REV	DATE	BY	CHK	APP

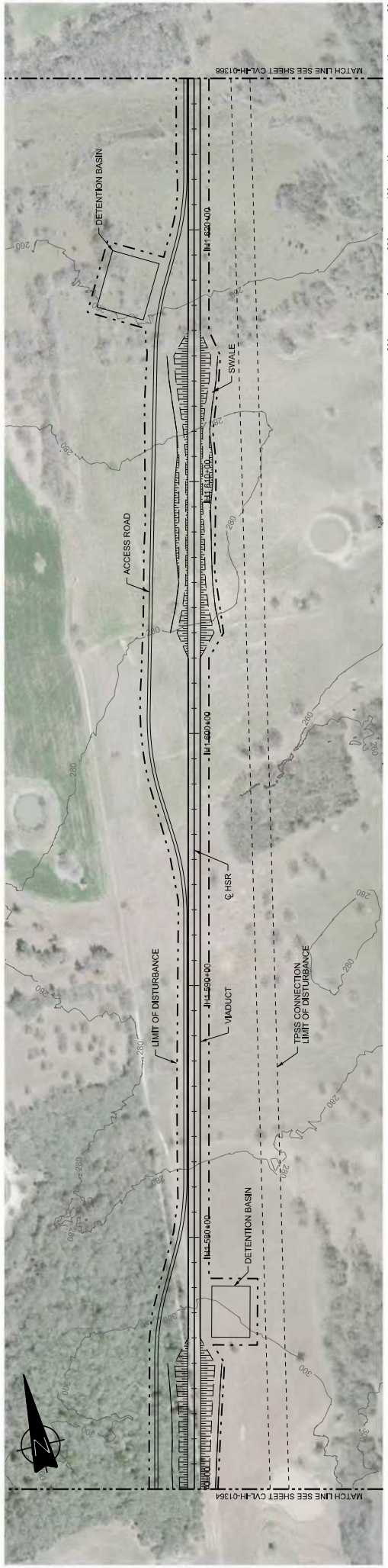
**ARUP**  
 1070 RHWIND AVE., SUITE 475  
 HOUSTON, TEXAS 77062, USA  
 www.arup.com    Tel: (713) 843 1467  
 Texas Registered Engineering Firm F-0980

**FRESE NICHOLS**  
 2711 North Island Ave., Suite 3000  
 Dallas, Texas 75238  
 www.fresenichols.com    Tel: (214) 371 2001  
 Texas Registered Engineering Firm F-0444

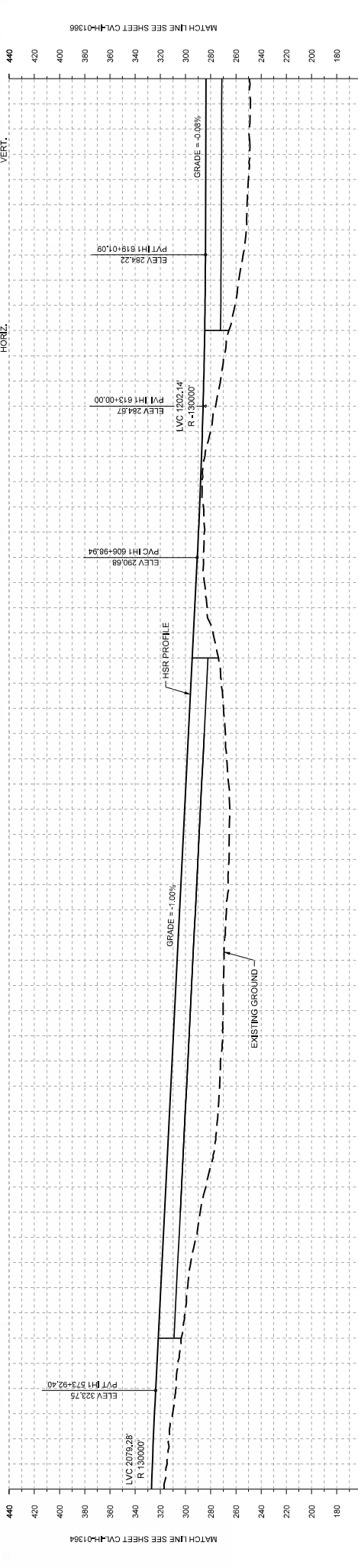
**TEXAS CENTRAL**  
 1400 South Lamar Street, Suite 1022, Dallas, Texas 75215

Client: **ARUP**  
 Drawing Title: **IH (45) SEGMENT CIVIL PLAN AND PROFILE IH1 514+00 TO IH1 570+00**

Scale: **AS SHOWN**  
 Drawing Status: **FINAL DRAFT**  
 Job No: **234180**  
 Drawing No: **CVL-IH-01364**  
 Rev: **01**



PLAN



STATIONING	IH1 570+00	IH1 580+00	IH1 590+00	IH1 600+00	IH1 610+00	IH1 620+00	IH1 626+00
HOR. ALIGNMENT	L=5235						
VER. ALIGNMENT	L=3026.54 G=-1.000%						
CUT AND FILL	R=130000 G=-0.075%						
TYP. SECTION	<div style="display: flex; justify-content: space-between;"> <span>EMBANKMENT (A)</span> <span>CUT (C)</span> <span>EMBANKMENT (B)</span> <span>VADUCT (E)</span> </div>						

PROFILE

DESIGNED BY	F. DAGRIN
CHECKED BY	R. GIBBINS
IN CHARGE	K. SEYMOUR
DATE	C. TAYLOR
REV	09/15/2017
BY	CHK
DATE	APP
DESCRIPTION	DISCIP: EN

**ARUP**  
1070 RHWood Ave., Suite 475  
Houston, Texas 77062, USA  
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**FRESE NICHOLS**  
2711 North Island Ave., Suite 300  
Dallas, Texas 75206  
www.fresenichols.com

**TEXAS CENTRAL**  
1408 South Lamar Street, Suite 1022, Dallas, Texas 75215

Client: **ARUP**

Contract Title: **IH (45) SEGMENT CIVIL PLAN AND PROFILE IH1 570+00 TO IH1 626+00**

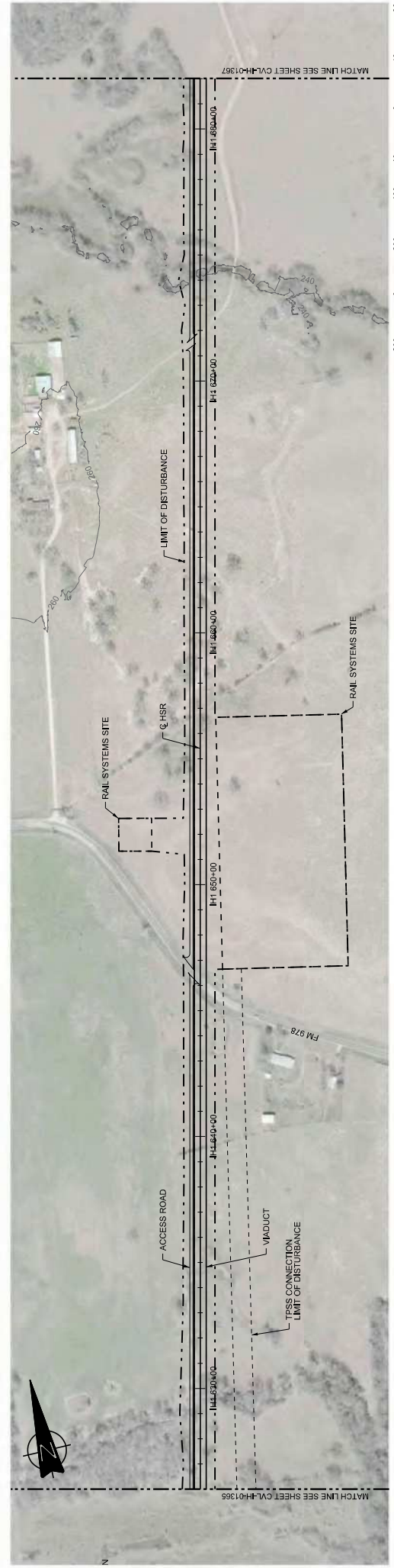
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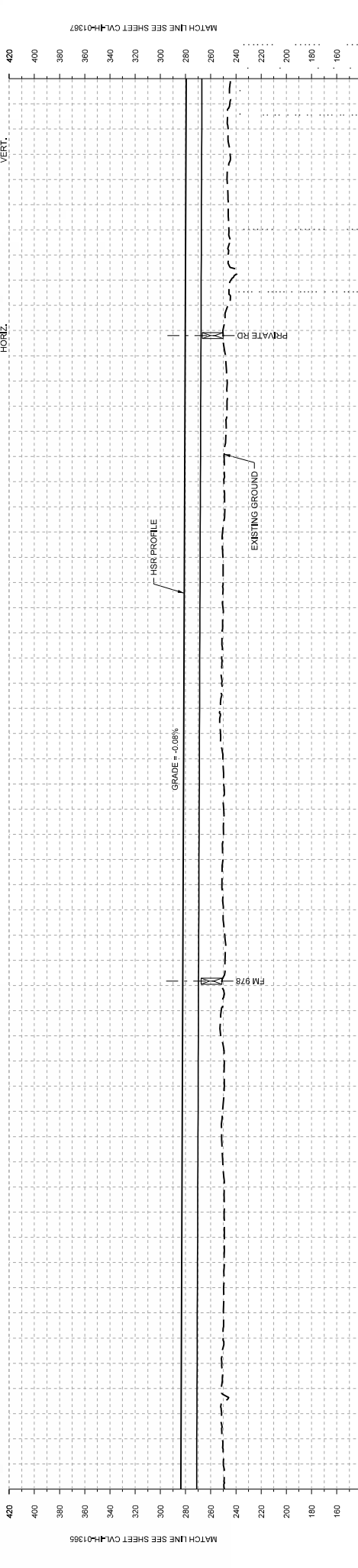
Drawn By: **CVL-JH-01365**

Checked By: **01**

Final Draft



PLAN



STATIONING	IH1 626+00	IH1 630+00	IH1 640+00	IH1 650+00	IH1 660+00	IH1 670+00	IH1 682+00
HOR. ALIGNMENT	L=5295						
VER. ALIGNMENT	L=368.88 G=-0.07%						
CUT AND FILL	VADUCT (E)						
TYP. SECTION							

PROFILE

DESIGNED BY	F. DAGRIN
CHECKED BY	R. GIBBINS
IN CHARGE	K. SEYMOUR
DATE	C. TAYLOR
REV	09/15/2017
BY	CHK
DATE	APP
DISCIPLINE	

**ARUP**  
 1070 RHMARD AVE., SUITE 475  
 HOUSTON, TEXAS 77062, USA  
 WWW.ARUP.COM TEL: +1 281 541 4607  
 TEXAS REGISTERED ENGINEER #17444

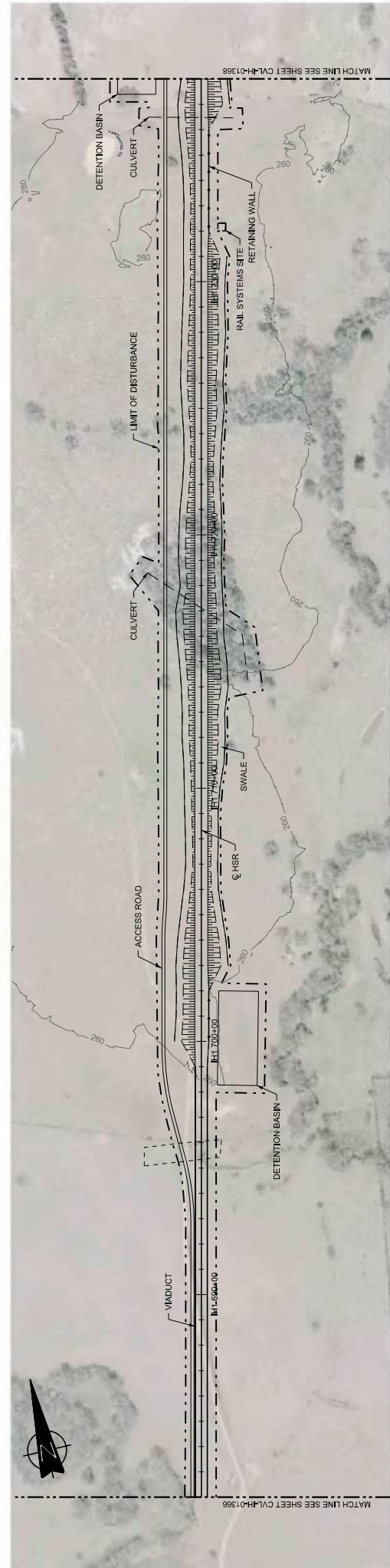
**FRESE NICHOLS**  
 2711 NORTH HIGHT AVE., SUITE 3000  
 DALLAS, TEXAS 75206  
 WWW.FRESE-NICHOLS.COM TEL: +1 214 372 2001  
 TEXAS REGISTERED ENGINEER #17444

**TEXAS CENTRAL**  
 1408 SOUTH LAMAR STREET, SUITE 1022, DALLAS, TEXAS 75215

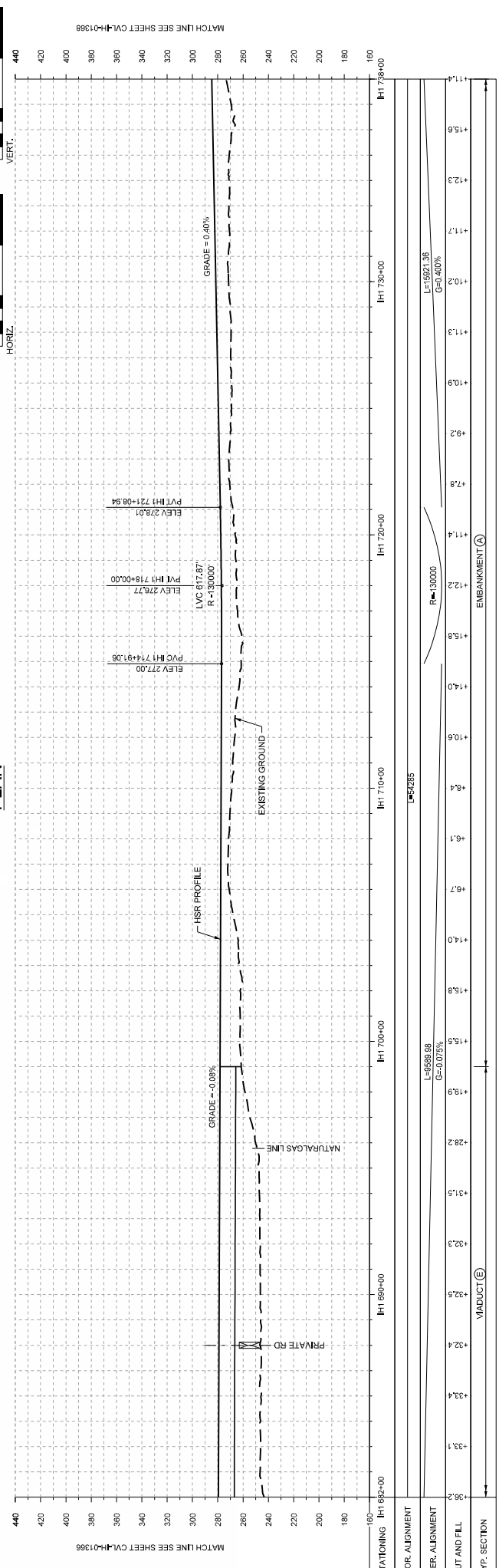
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 Job No: **IH1 626+00 TO IH1 662+00**

Scale: **AS SHOWN**  
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 Job No: **234180**  
 Drawing No: **CVL-IH-01366**  
 Rev: **01**





PLAN



PROFILE

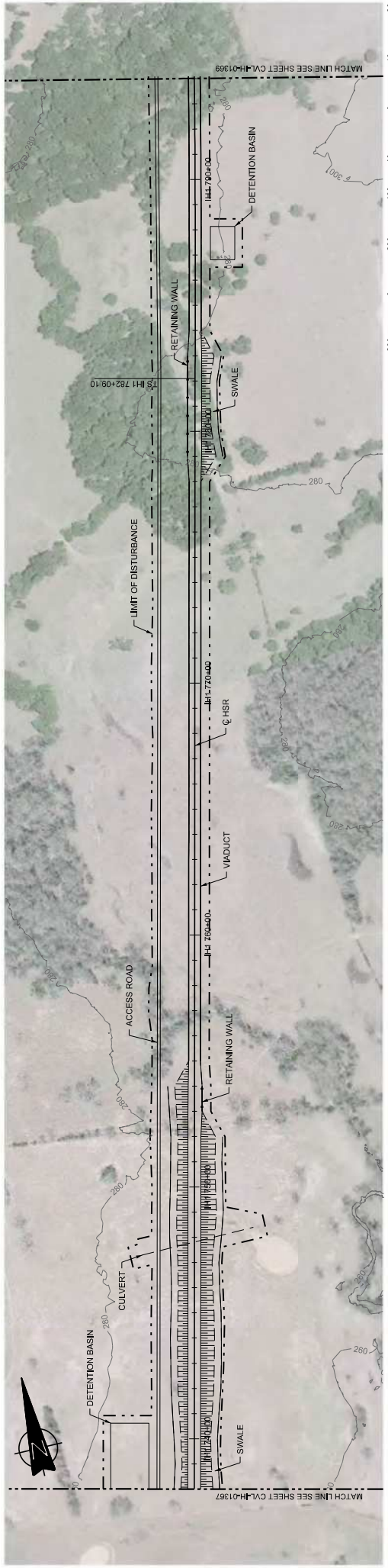
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CHECKED BY <b>R. GIBBINS</b>	BY CHK
DESIGNED BY <b>K. SEYMOUR</b>	DATE
CHECKED BY <b>C. TAYLOR</b>	BY CHK
DATE	APP
DISCIP: EN	

**ARUP**  
 1070 RHM Road, Suite 475  
 Houston, Texas 77062, USA  
 Tel: +1 281 445 4400  
 Fax: +1 281 445 4407  
 www.arup.com  
 Texas Registered Engineering Firm #1980

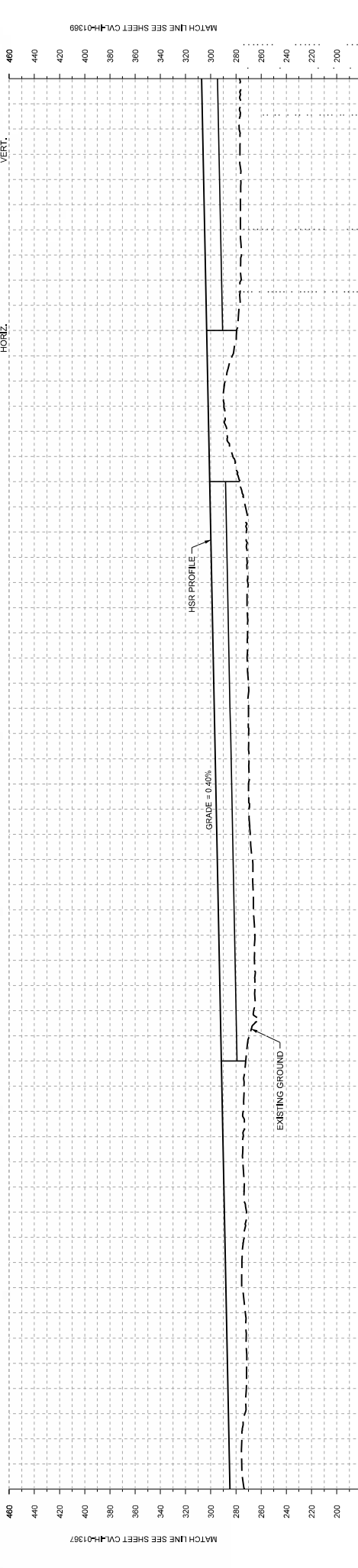
**FRESE NICHOLS**  
 2711 North Island Ave., Suite 3000  
 Dallas, Texas 75206  
 Tel: 214 312 2001  
 Fax: 214 312 2001  
 www.fresenichols.com  
 Texas Registered Engineering Firm #144

**TEXAS CENTRAL**  
 1400 South Lamar Street, Suite 1022, Dallas, Texas 75215

Scale: AS SHOWN  
 Drawing Title: **FINAL DRAFT**  
 Job No: 234180  
 Drawing No: CIVL-IH-01367  
 Rev: 01



PLAN



STATIONING	IH1 784+00	IH1 740+00	IH1 750+00	IH1 760+00	IH1 770+00	IH1 780+00	IH1 790+00	IH1 794+00
HOR. ALIGNMENT	L=1527.35							
VER. ALIGNMENT	G=0.400%							
CUT AND FILL	EMBAKMENT (E)							
TYP. SECTION	VIADUCT (E)							



MATCH LINE SEE SHEET CIVL-IH-01367

MATCH LINE SEE SHEET CIVL-IH-01369

PROFILE

DESIGNED BY	F. DAGRIN
CHECKED BY	R. GIBBINS
DESIGNED BY	K. SEYMOUR
CHECKED BY	C. TAYLOR
DATE	09/15/2017
BY	CHK
APP	APP

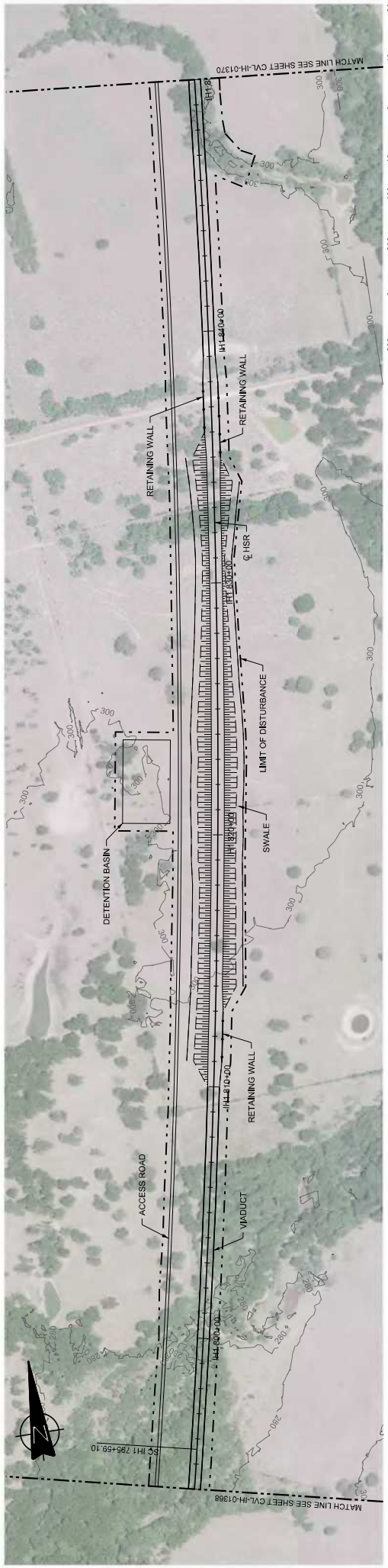
**ARUP**  
 1070 Riva Road, Suite 475  
 Houston, Texas 77002, USA  
 www.arup.com  
 Tel: (713) 443 1467  
 Texas Registered Engineering Firm F-1980

**FREES NICHOLS**  
 2711 North Island Ave., Suite 300  
 Dallas, Texas 75206  
 www.freesnichols.com  
 Tel: (214) 372 2001  
 Texas Registered Engineering Firm F-144

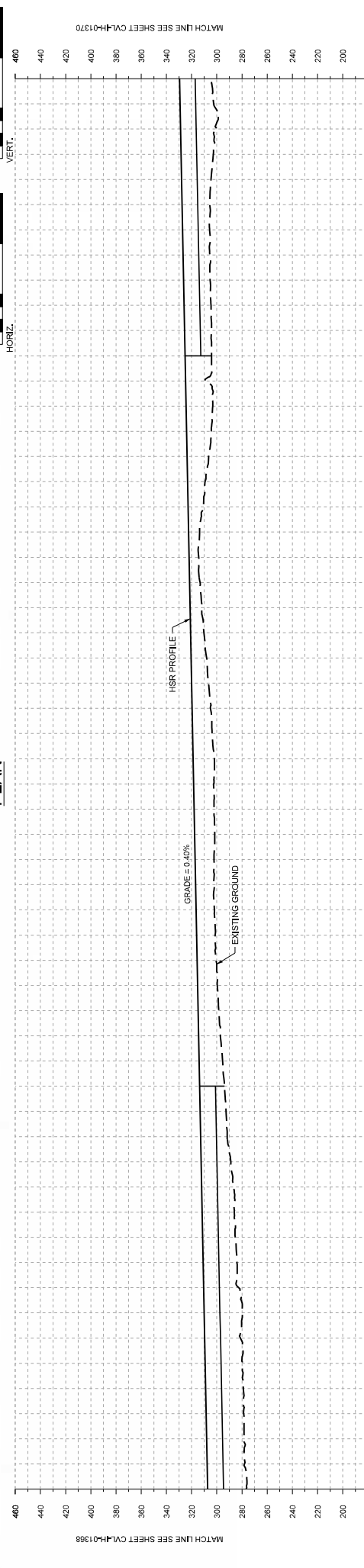
**TEXAS CENTRAL**  
 1400 South Lamar Street, Suite 1022, Dallas, Texas 75215

Client: **ARUP**  
 Drawing Title: **IH (45) SEGMENT CIVIL PLAN AND PROFILE**  
 Drawing No: **IH1 738+00 TO IH1 794+00**

Scale: **AS SHOWN**  
 Drawing Status: **FINAL DRAFT**  
 Job No: **234180**  
 Drawing No: **CVL-IH-01368**  
 Rev: **01**



PLAN



STATIONING	IH1 794+00	IH1 800+00	IH1 810+00	IH1 820+00	IH1 830+00	IH1 840+00	IH1 850+00
HOR. ALIGNMENT	L=1350						
VER. ALIGNMENT	R=63000 L=62.142						
CUT AND FILL	L1=1527.35 G=0.400%						
TYP. SECTION	VIADUCT (E)				EMBANKMENT (A)		RETAINED FILL (B)

PROFILE

DESIGNED BY	F. DAGRIN
CHECKED BY	R. GIBBINS
IN CHARGE	K. SEYMOUR
DATE	C. TAYLOR
REV	09/15/2017
BY	CHK
DATE	APP
DESCRIPTION	DISCIP: EN

**ARUP**  
 1070 Riva Road, Suite 475  
 Houston, Texas 77042, USA  
 Tel: +1 281 443 1467  
 www.arup.com

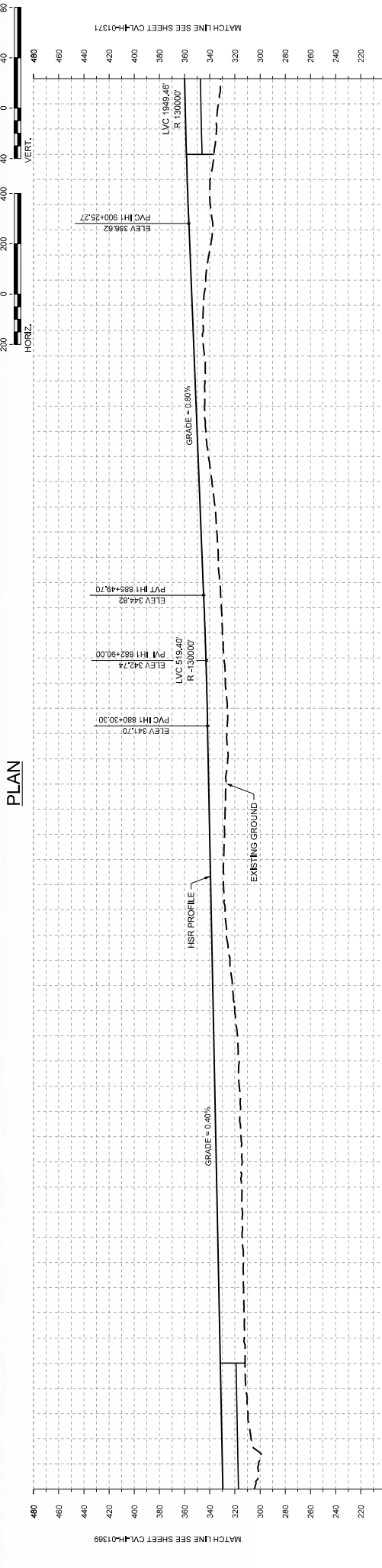
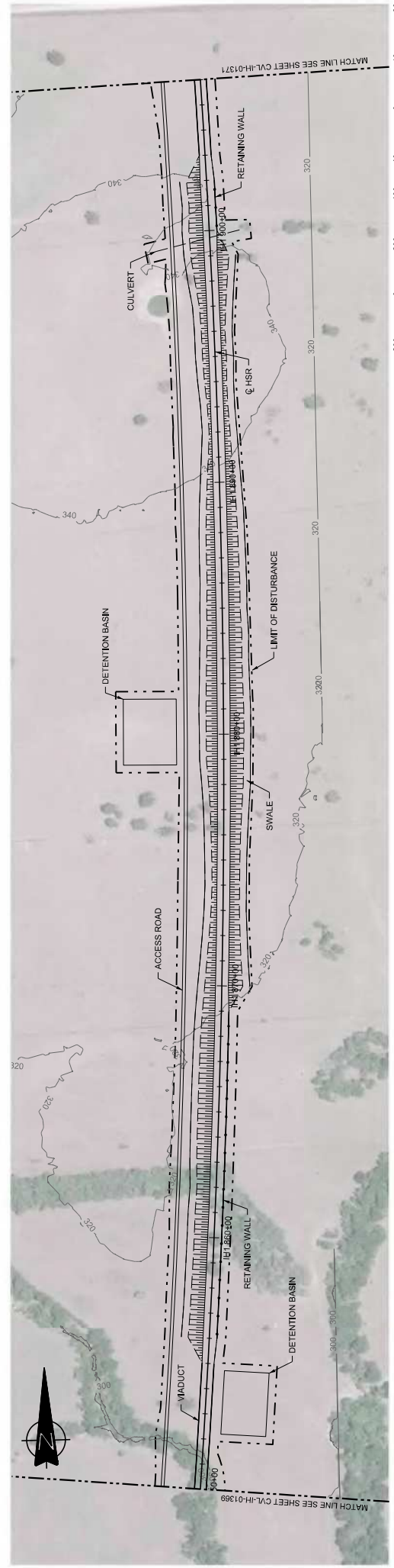
**FRESE NICHOLS**  
 2711 North Island Ave., Suite 3000  
 Dallas, Texas 75206  
 Tel: +1 214 312 2001  
 www.fresenichols.com

**TEXAS CENTRAL**  
 1400 South Lamar Street, Suite 1022, Dallas, Texas 75215

Client: **ARUP**  
 Drawing Title: **IH (45) SEGMENT CIVIL PLAN AND PROFILE**  
 Drawing No: **IH1 794+00 TO IH1 850+00**

Scale: **AS SHOWN**  
 Drawing Status: **FINAL DRAFT**  
 Job No: **234180**  
 Drawing No: **CVL-IH-01369**  
 Rev: **01**





STATIONING	IH1 850+00	IH1 870+00	IH1 880+00	IH1 890+00	IH1 900+00	IH1 910+00	IH1 920+00	IH1 930+00	IH1 940+00	IH1 950+00	IH1 960+00	IH1 970+00	IH1 980+00
HOR. ALIGNMENT	R=42000 L=22142												
VER. ALIGNMENT	L=1527.136 G=0.400%												
CUT AND FILL	L=1475.38 G=0.800%												
TYP. SECTION	VIADUCT (E)												

DESIGNED BY  
**F. DAGRIN**

CHECKED BY  
**R. GIBBINS**

DESIGNED BY  
**K. SEYMOUR**

CHECKED BY  
**C. TAYLOR**

DATE  
**09/15/2017**

DISCIP: EN

**ARUP**

1070 Riva Road, Suite 475  
Houston, Texas 77062, USA  
www.arup.com

2711 North Island Ave., Suite 3000  
Dallas, Texas 75206, USA  
www.arup.com

1400 South Lamar Street, Suite 1022 Dallas, Texas 75215  
Texas Registered Engineering Firm #5144

Scale: AS SHOWN

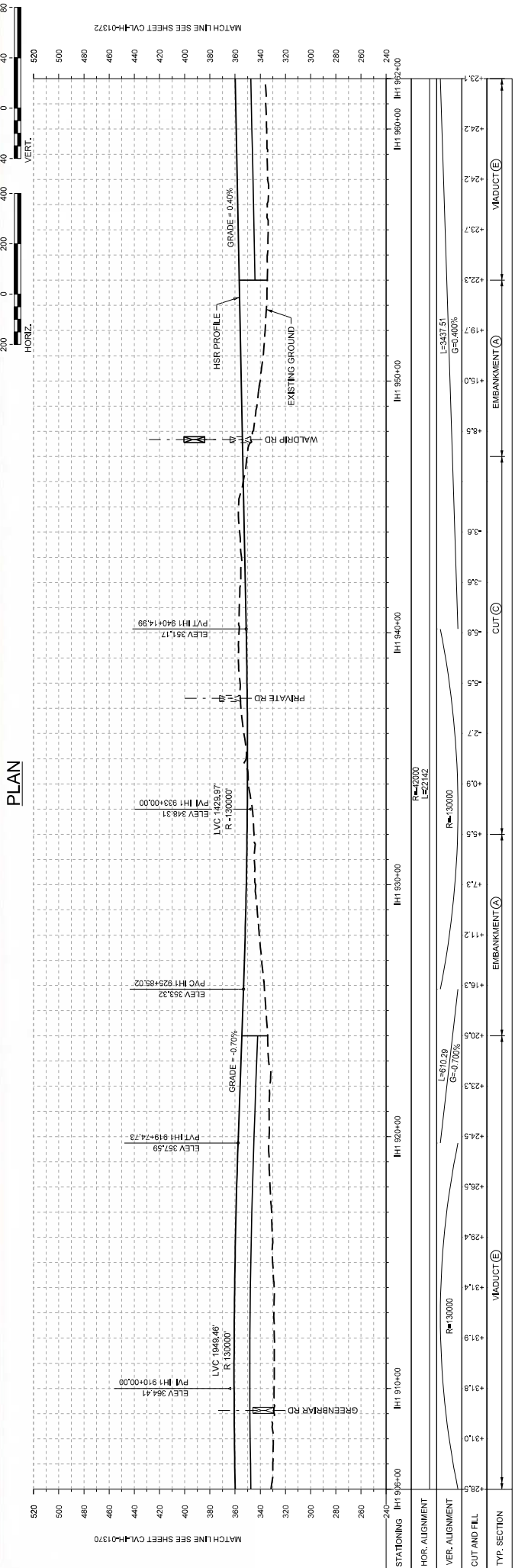
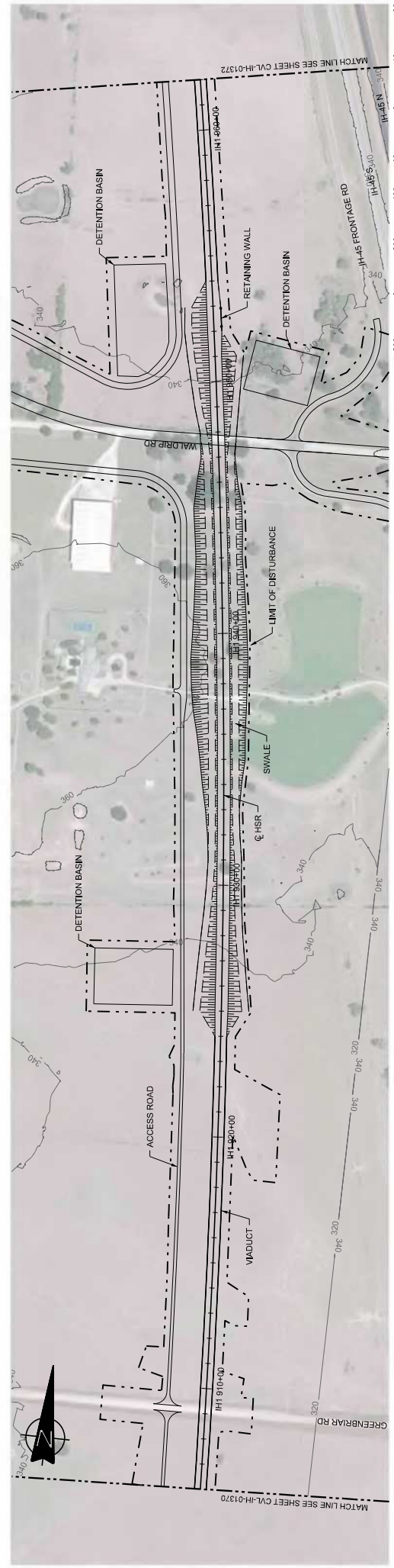
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Job No: **234180**

Drawn By: **CVL-IH-01370**

Checked By: **01**

Final Draft



DESIGNED BY <b>F. DAGRIN</b>	DATE 09/15/2017	DISCIP RKN	APP
CHECKED BY <b>R. GIBBINS</b>	DATE	CHK	
DESIGNED BY <b>K. SEYMOUR</b>	DATE	CHK	
CHECKED BY <b>C. TAYLOR</b>	DATE	CHK	

Scale: AS SHOWN	Sheet: FINAL DRAFT
Drawing Title: IH (45) SEGMENT CIVIL PLAN AND PROFILE	Job No: 234180
Client: ARUP	Drawn By: CVL-IH-01371
Client: FREESE NICHOLS	Rev: 01

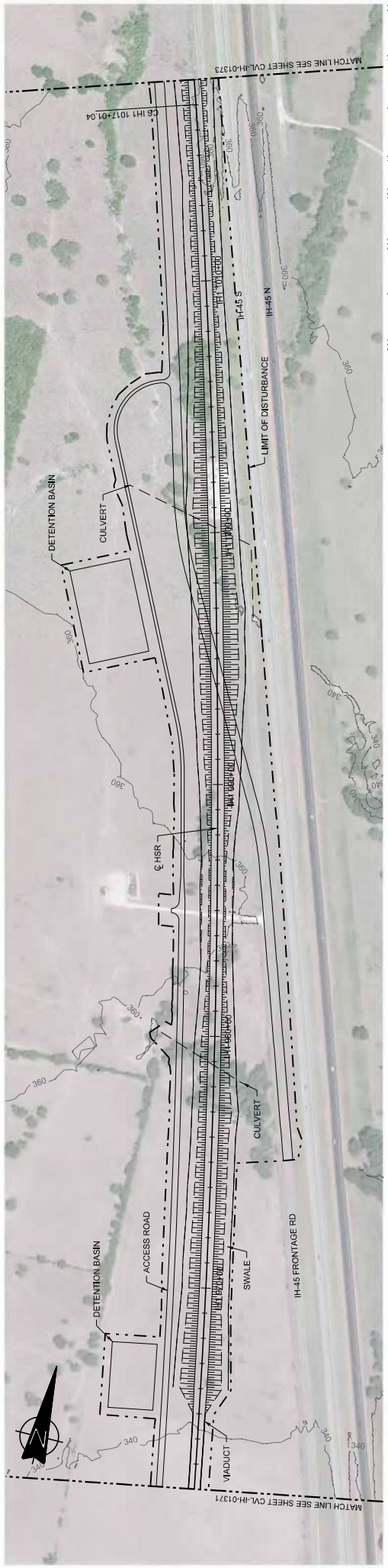
Client: ARUP

2711 North Highway Ave., Suite 3300  
Dallas, Texas 75206 USA  
www.arup.com Tel: (214) 761 3400

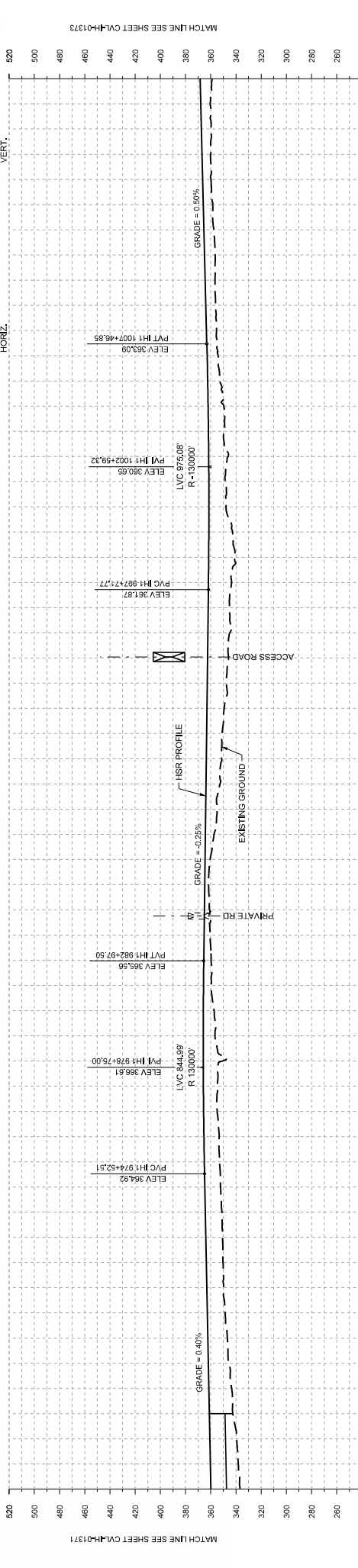
Client: FREESE NICHOLS

1400 South Lamar Street, Suite 1022, Dallas, Texas 75215  
Texas Registered Engineering Firm #1968





PLAN



STATIONING	IH1 962+00	IH1 970+00	IH1 980+00	IH1 990+00	IH1 1000+00	IH1 1010+00	IH1 1018+00
HOR. ALIGNMENT	L=2200 E=22142						
VER. ALIGNMENT	L=3437.51 G=0.400%						
CUT AND FILL	EMBANKMENT (E) CUT (C)						
TYP. SECTION	EMBANKMENT (E)						

PROFILE

DESIGNED BY	F. DAGRIN
CHECKED BY	R. GIBBINS
IN CHARGE	K. SEYMOUR
DATE	C. TAYLOR
REV	09/15/2017

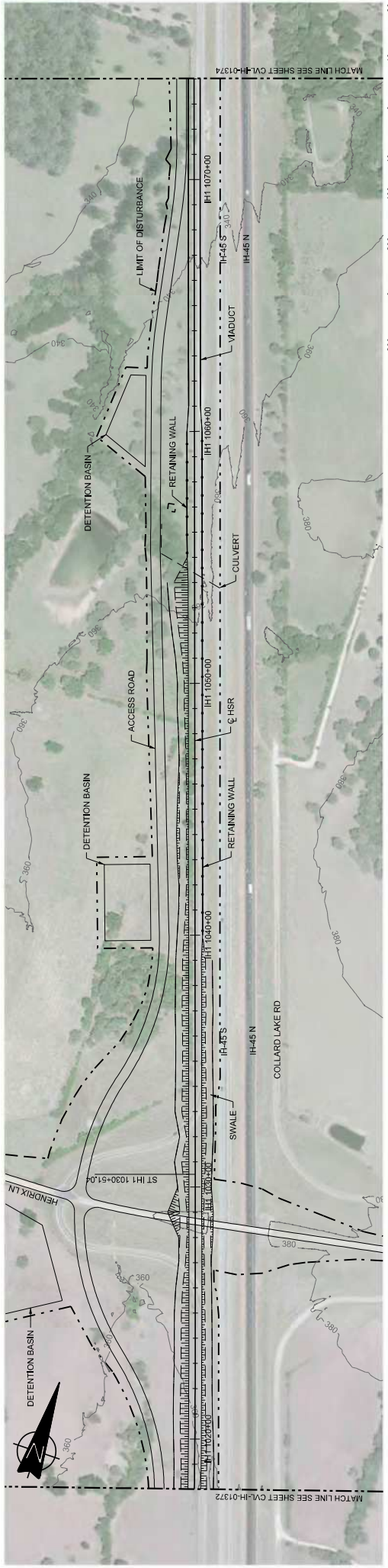
**ARUP**  
 1070 Riva Road, Suite 475  
 Houston, Texas 77002, USA  
 www.arup.com Tel: +1 281 543 1467  
 Texas Registered Engineering Firm #1980

**FRESE NICHOLS**  
 2711 North Island Ave., Suite 300  
 Dallas, Texas 75206  
 www.fresenichols.com Tel: 214 371 2001  
 Texas Registered Engineering Firm #2144

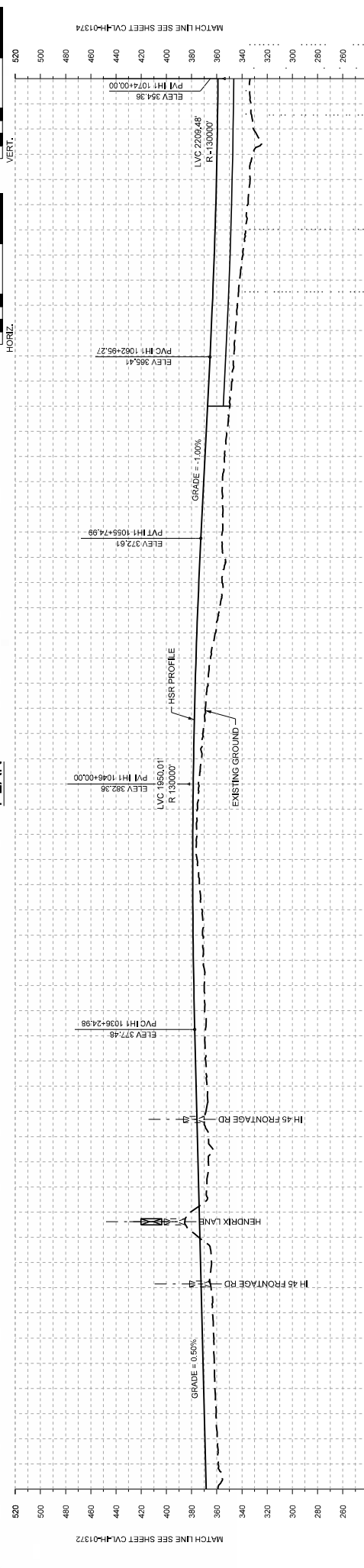
**TEXAS CENTRAL**  
 1400 South Lamar Street, Suite 1022, Dallas, Texas 75215

Client: **IH (45) SEGMENT CIVIL PLAN AND PROFILE**  
 IH1 962+00 TO IH1 1018+00

Scale: **AS SHOWN**  
 Drawing Status: **FINAL DRAFT**  
 Job No: **234180**  
 Drawing No: **CVL-IH-01372**  
 Rev: **01**



PLAN



STATIONING	IH1 1018+00	IH1 1023+00	IH1 1030+00	IH1 1040+00	IH1 1050+00	IH1 1060+00	IH1 1070+00	IH1 1074+00
HOR. ALIGNMENT	L=1330							
VER. ALIGNMENT	L=2818.12 G=0.500%							
CUT AND FILL	RETAINED FILL (R) EMBANKMENT (E) CUT (C)							
TYP. SECTION	EMBANKMENT (E) EMBANKMENT (E) CUT (C) EMBANKMENT (E) VIADUCT (V)							

PROFILE

DESIGNED BY	F. DAGRIN
CHECKED BY	R. GIBBINS
DESIGNED BY	K. SEYMOUR
CHECKED BY	C. TAYLOR
DATE	09/15/2017
BY	CHK
APP	APP

ARUP  
 100 South Lamar Street, Suite 1022, Dallas, Texas 75215  
 2711 North Howard Ave., Suite 300  
 Dallas, Texas 75206  
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Client: **FRESE NICHOLS**

Contract No: **IH (45) SEGMENT CIVIL PLAN AND PROFILE**  
 Drawing No: **IH1 1018+00 TO IH1 1074+00**

Scale: **AS SHOWN**  
 Drawing Status: **FINAL DRAFT**

Job No: **234180**  
 Drawing No: **CVL-IH-01373**  
 Rev: **01**