

**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 3 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)
REPORTS			
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
TCRR FDCE v7 DWGS VOLUME 1 (<i>General Sheets and Typical Sections</i>)			
9/15/17	G	1 of 21	TCRR FDCE v7 DWGS VOLUME 1.PDF (<i>General Sheets and Typical Sections</i>)
TCRR FDCE v7 DWGS VOLUME 2 (<i>Railway Alignment Plan and Profile Sheets</i>)			
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>)
TCRR FDCE v7 DWGS VOLUME 3 (<i>Stations, Maintenance Facilities, and Railway Systems Sheets</i>)			
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>)
TCRR FDCE v7 DWGS VOLUME 4 (<i>Roadway Plan Sheets</i>)			
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>)

Document Format	Date of Document	Number of Copies	Title of Document or Drawing Title
9/15/17	G	18 of 21	TCRR FDCE v7 DWGS VOLUME 4-6.PDF (<i>Ellis West Segment</i>)
9/15/17	G	19 of 21	TCRR FDCE v7 DWGS VOLUME 4-7.PDF (<i>Ellis East Segment</i>)
9/15/17	G	20 of 21	TCRR FDCE v7 DWGS VOLUME 4-8.PDF (<i>Dallas Segment</i>)
TCRR FDCE v7 DWGS VOLUME 5 (<i>Wildlife Crossing Sheets</i>)			
9/15/17	G	21 of 21	TCRR FDCE v7 DWGS VOLUME 5.PDF (<i>Wildlife Crossing Sheets</i>)

These are transmitted as checked below:

- Deliverable For Information As requested For your use
 For approval For Review and Comment Return Other: Publication with DEIS

REMARKS:

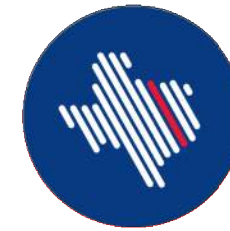
The files transmitted herewith represent a final submittal of the Final Draft Conceptual Engineering (FDCE) design report and drawings for the Dallas to Houston High-Speed Rail Project. This v7 submittal of the FDCE report is intended for distribution on the FRA website with the Draft EIS (DEIS) for public review.



Delivered VIA Outlook Email Hand Delivery Courier PMS Notification USPS

PREPARED BY: Christopher Taylor **Date:** November 17, 2017

IF ENCLOSURES ARE NOT AS NOTED, KINDLY NOTIFY US AT ONCE.



**TEXAS
CENTRAL**



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



U.S. Department of Transportation
Federal Railroad Administration

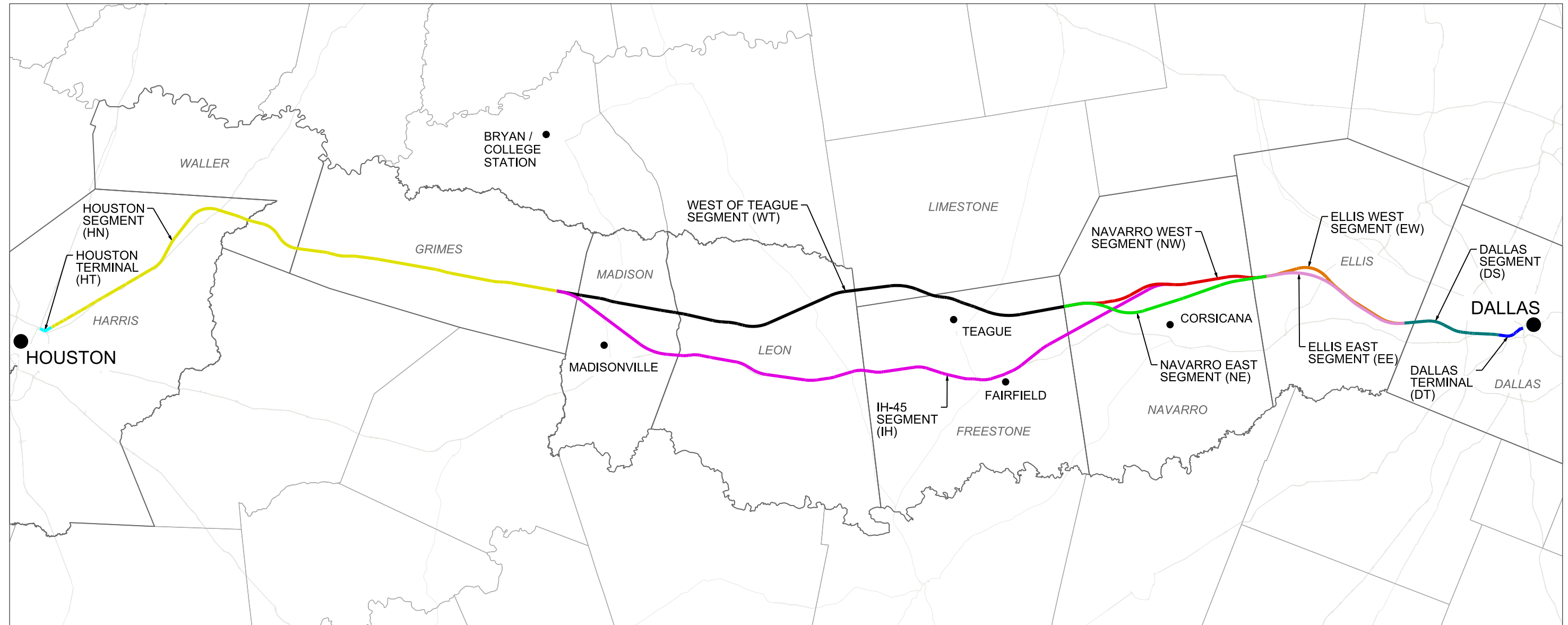
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COVER SHEET



ALIGNMENT ALTERNATIVE	OE 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.



REV	DATE	BY	CHK	APP	DESCRIPTION

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

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Client

TEXAS CENTRAL
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
GENERAL LOCATION PLAN

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

VOLUME 1 - GENERAL SHEETS & TYPICAL SECTIONS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Includes sections 1-1 GENERAL, 1-2 RAILWAY TYPICAL SECTIONS, 1-3 ROADWAY AND GRADE SEPARATION TYPICAL SECTIONS, 1-4 CIVIL STRUCTURES TYPICAL DETAILS, 1-5 CIVIL UTILITIES TYPICAL DETAILS, and 1-6 GENERAL - ALIGNMENT CURVE DATA TABLES.

VOLUME 2 - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Section 2-1 HOUSTON SEGMENT, listing drawings from CVL-HN-01101 to CVL-HN-01108-2.

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Section 2-2 WEST OF TEAGUE SEGMENT, listing drawings from CVL-HN-01107-3 to CVL-HN-01180.

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Section 2-2 WEST OF TEAGUE SEGMENT, listing drawings from CVL-WT-01250 to CVL-WT-01296.

Table with columns: REV, DATE, BY, CHK, APP, DESCRIPTION. Revision table for the drawing.

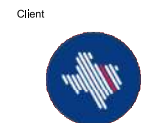
Table with columns: DESIGNED BY, DRAWN BY, CHECKED BY, IN CHARGE, DATE. Designer information table.



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1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title

GENERAL INDEX SHEET 1 OF 5

Scale NO SCALE

Drawing Status

FINAL DRAFT

Job No 234180

Drawing No GEN-00-00003

Rev 01

VOLUME 2 - RAILWAY ALIGNMENT PLAN AND PROFILE SHEETS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Includes sections for 2-2 WEST OF TEAGUE SEGMENT and 2-3 IH-45 SEGMENT.

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Includes sections for 2-4 NAVARRO WEST SEGMENT and 2-5 NAVARRO EAST SEGMENT.

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Includes sections for 2-6 ELLIS WEST SEGMENT and 2-7 ELLIS EAST SEGMENT.

Table with columns: REV, DATE, BY, CHK, APP, DESCRIPTION. Revision table for drawing changes.

Table with columns: DESIGNED BY, DRAWN BY, CHECKED BY, IN CHARGE, DATE. Designer information table.



Table with columns: Drawing Title, Scale, Drawing Status, Job No, Drawing No, Rev. Project metadata table.

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

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Lists drawing numbers and descriptions for segments 2-6, 2-7, and 2-8.

VOLUME 3 - STATIONS, MAINTENANCE FACILITIES AND RAILWAY SYSTEMS SHEETS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Lists drawing numbers and descriptions for stations, maintenance facilities, and railway systems sheets.

Table with columns: Drawing ID, Description. Lists drawing numbers and descriptions for various station options, industrial stations, and maintenance facilities.

Table with columns: REV, DATE, BY, CHK, APP, DESCRIPTION. Includes a revision table and a design information table with fields for Designer, Drawn, Checked, In Charge, and Date.

Project information block containing logos for ARUP, FREESE & NICHOLS, and TEXAS CENTRAL. Includes drawing title 'GENERAL INDEX SHEET 3 OF 5', scale 'NO SCALE', drawing status 'FINAL DRAFT', and job/drawing numbers.

PLOT TIME: 9/25/2017 5:41:24 PM

PLOT BY: N-YPWICS01S

VOLUME 3 - STATIONS, MAINTENANCE FACILITIES AND RAILWAY SYSTEMS SHEETS

Table with 2 columns: DRAWING NO. and DRAWING DESCRIPTIONS. Includes sections for 3-2 MAINTENANCE FACILITIES, YARDS AND SHOPS and 3-3 RAILWAY SYSTEMS.

VOLUME 4 - ROADWAY PLAN SHEETS

Table with 2 columns: DRAWING NO. and DRAWING DESCRIPTIONS. Includes section for 4-1 HOUSTON SEGMENT with numerous drawing entries.

Table with 2 columns: DRAWING NO. and DRAWING DESCRIPTIONS. Includes sections for 4-2 WEST OF TEAGUE SEGMENT and 4-3 IH-45 SEGMENT with numerous drawing entries.

Table with 5 columns: REV, DATE, BY, CHK, APP, and DESCRIPTION. Contains revision history information.

Table with 2 columns: Field Name and Value. Includes fields for DESIGNED BY, DRAWN BY, CHECKED BY, IN CHARGE, and DATE.



Client: TEXAS CENTRAL
Drawing Title: GENERAL INDEX SHEET 4 OF 5
Scale: NO SCALE
Drawing Status: FINAL DRAFT

Table with 3 columns: Job No, Drawing No, and Rev. Contains project identification numbers.

VOLUME 4 - ROADWAY PLAN SHEETS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Lists drawings 1H-45 SEGMENT and 4-4 NAVARRO WEST SEGMENT.

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Lists drawings 4-5 NAVARRO EAST SEGMENT, 4-6 ELLIS WEST SEGMENT, 4-7 ELLIS EAST SEGMENT, and 4-8 DALLAS SEGMENT.

VOLUME 5 - WILDLIFE CROSSING SHEETS

Table with columns: DRAWING NO., DRAWING DESCRIPTIONS. Lists drawings 5-1 WILDLIFE CROSSING TYPICAL SECTIONS.

Revision table with columns: REV, DATE, BY, CHK, APP, DESCRIPTION.

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



Client: Texas Central
Drawing Title: GENERAL INDEX SHEET 5 OF 5
Scale: NO SCALE
Drawing Status: FINAL DRAFT
Job No: 234180
Drawing No: GEN-00-00007
Rev: 01

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GENERAL NOTES:

1. THESE DRAWINGS ACCOMPANY FINAL DRAFT CONCEPTUAL ENGINEERING REPORT (FDCE) V7 REPORT DATED SEPTEMBER 15, 2017.
2. DRAWING SET INCLUDES FIVE (5) VOLUMES.
3. CONCEPTUAL ENGINEERING WAS DEVELOPED TO IDENTIFY PROJECT LIMIT OF DISTURBANCE (LOD), OR "PROJECT FOOTPRINT". CONCEPTUAL ENGINEERING DRAWINGS AND FDCE REPORT ARE ISSUED TO PROVIDE PROJECT DEFINITION FOR ENVIRONMENTAL ANALYSES ONLY. FINAL DESIGN WOULD BE DEVELOPED TO MITIGATE ANY IMPACTS IDENTIFIED THROUGH ENVIRONMENTAL ANALYSES, NOT FOR CONSTRUCTION.
4. FOR STANDARD GENERAL ABBREVIATIONS, SEE DRAWING GEN-00-0009.
5. FOR STANDARD GENERAL SYMBOLS, SEE DRAWINGS GEN-00-0009.
6. "ORIGINAL GROUND" SHOWN ON PROFILES REFERS TO THE APPROXIMATE EXISTING GROUND LINE AT HSR CENTERLINE AS SHOWN ON PLAN AND PROFILE DRAWINGS.
7. ALL HORIZONTAL AND VERTICAL DISTANCES ARE IN US CUSTOMARY UNITS EXCEPT AS NOTED OTHERWISE.
8. GENERAL NOTES FOR PROJECT ELEMENTS INCLUDED ON GENERAL NOTES PAGES. REFER TO INDIVIDUAL DISCIPLINE DRAWINGS FOR ADDITIONAL NOTES.

BASEMAPPING NOTES:

1. DTM DATA SHOWN ON THE DRAWINGS WAS OBTAINED FROM THE TEXAS NATURAL RESOURCES INFORMATION SYSTEM (TNRIS) AND HOUSTON-GALVESTON AREA COUNCIL (HGAC).
 DALLAS COUNTY LIDAR, 2009, SOURCED FROM TNRIS.
 HGAC LIDAR, 2008.
 TNRIS LIDAR, 2009-2013.
 TNRIS STRATMAP CONTOURS, 1997.
2. LIDAR SOURCES WERE FILTERED TO SHOW ONLY BARE EARTH, AND SUPPLEMENTED BY CONTOUR DATA WHERE LIDAR SOURCES WERE NOT AVAILABLE.
3. NAD 83 HORIZONTAL CONTROL DATUM WAS USED FOR HORIZONTAL COORDINATE VALUES.
4. NAVD 88 VERTICAL DATUM WAS USED FOR ELEVATION VALUES.
5. ALL DATA HAS BEEN REPROJECTED TO TEXAS STATE PLANE, SOUTH CENTRAL, CENTRAL, AND NORTH CENTRAL ZONES, US SURVEY FEET.
6. AERIAL IMAGERY WAS OBTAINED FROM ARCGIS ONLINE SERVICES. SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEX, GETMAPPING, AEROGRIID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY.
7. 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 VERIFIED THAT BUILDINGS HAVE BEEN REMOVED, THE AERIAL IMAGERY ON THE PLAN SHEET IS MARKED WITH HATCHING.

LOD NOTES:

1. THE PROJECT LOD WAS DEVELOPED TO DEFINE A CONSERVATIVE ESTIMATE OF THE POTENTIAL "PROJECT FOOTPRINT" FOR ENVIRONMENTAL ANALYSIS AND DOES NOT REPRESENT THE FINAL HSR RIGHT-OF-WAY (ROW). PROPERTY WITHIN THE LOD MAY BE RETURNED TO ADJACENT LANDOWNERS OR OTHER PRIVATE PARTIES FOLLOWING PROJECT CONSTRUCTION OR MAY BE TRANSFERRED TO ROADWAY OR UTILITY AUTHORITY AS APPROPRIATE. PROPOSED PROJECT WORKS WITHIN PRIVATE PROPERTIES WOULD BE SUBJECT TO NEGOTIATION WITH LANDOWNERS. ANY TEMPORARY OR PERMANENT USE OF LAND OWNED BY TXDOT, COUNTY, MUNICIPAL, OR OTHER PUBLIC ENTITIES WOULD REQUIRE APPROPRIATE APPROVALS.
2. LOD USED FOR EIS ANALYSIS FOOTPRINT.

TRACK NOTES:

1. THE ALIGNMENT SHOWN ON THE PLAN AND PROFILE DRAWINGS REPRESENTS THE CENTERLINE OF THE TWO-TRACK HSR MAINLINE TRACKS.
2. 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.
3. THE PROPOSED HSR SYSTEM INCLUDES TWO TRACKS WITH ADDITIONAL TRACKS AT STATIONS, MAINTENANCE OF WAY, AND TRAINSET MAINTENANCE FACILITIES, AS SHOWN ON DRAWINGS.
4. 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:

1. SECTION TYPE DETAIL SHOWN ON PROFILE SHEETS REPRESENT A SIMPLIFIED SUMMARY OF THE MAJOR STRUCTURAL TYPE OF THE PROPOSED HSR. THE ACTUAL PLAN DIMENSIONS TAKE PRECEDENCE OVER THE SECTION TYPE IDENTIFIED IN PROFILE.
2. ALL EXISTING AND PROPOSED STRUCTURAL ELEMENTS SHOWN ARE BASED ON CONCEPTUAL ENGINEERING DESIGN AND AERIAL IMAGERY AND MAY BE REVISED BASED ON MORE ADVANCED SURVEY AND DESIGNS.
3. SEE SHEET GEN-00-00010 FOR A KEY TO INFORMATION SHOWN ON PLAN AND PROFILE DRAWINGS.
4. 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:

1. EXISTING ROADWAY LOCATIONS ARE APPROXIMATE BASED ON AERIAL MAPS.
2. PROPOSED ROADWAY WORKS, INCLUDING NEW ROADWAYS, RECONFIGURATION AND REALIGNMENTS OF EXISTING ROADWAYS, AND ROADWAY REMOVALS ARE CONCEPTUAL IN NATURE AND WERE DEVELOPED TO IDENTIFY GENERAL CONFIGURATION AND LOCATION FOR ENVIRONMENTAL IMPACT ANALYSES. ROADWAY WORKS WOULD BE DETAILED DURING FINAL DESIGN AND WOULD COMPLY WITH APPLICABLE STATE, CITY, COUNTY, OR LOCAL REQUIREMENTS.
3. SEE SHEET GEN-00-00011 FOR A KEY TO INFORMATION SHOWN ON ROADWAY PLAN DRAWINGS.
4. 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.
5. SUPERELEVATION TRANSITION LENGTHS WERE NOT DETAILED IN ROADWAY APPROACH DESIGN.
6. SEE DRAWINGS CVL-00-03030 TO CVL-00-03036 FOR TYPICAL ROADWAY CROSS SECTIONS.
7. ROADWAY REMOVALS ARE NOT SHOWN ON RAIL PLAN AND PROFILE SHEETS. REFER TO ROADWAY PLAN SHEETS IN VOLUME 3 FOR ALL ROADWAY REMOVALS.
8. NOT ALL PRIVATE ROADS AND DRIVEWAYS ARE REPRESENTED ON THE RAIL PLAN AND PROFILE SHEETS.
9. THE CLEARANCE ENVELOPES SHOWN ON THE RAIL PLAN AND PROFILE SHEETS REPRESENT THE APPROXIMATE ROADWAY CLEARANCE ENVELOPE. THE BOTTOM OF THE CLEARANCE ENVELOPE REPRESENTS THE TOP OF THE ROADWAY PAVEMENT. CLEARANCE ENVELOPE DOES NOT INCLUDE ROADWAY STRUCTURAL ELEMENTS.
10. ROADWAY ELEVATIONS FOR ROADWAY OVER RAILWAY CROSSING DO NOT REPRESENT THE PROPOSED ROADWAY ELEVATION, BUT RATHER THE MINIMUM HEIGHT REQUIRED FOR CLEARANCES, INCLUDING ALLOWANCES FOR ROADWAY STRUCTURAL ELEMENTS. SEE FDCE REPORT FOR ADDITIONAL INFORMATION.
11. ROADWAY TYPICAL SECTIONS ACCOUNT FOR THE NECESSARY SPACE TO CONSTRUCT TEMPORARY ROADWAYS DURING CONSTRUCTION. CLOSE COORDINATION WITH ROADWAY AUTHORITIES, COMMUNITIES, AND EMERGENCY RESPONSE ENTITIES WOULD BE UNDERTAKEN DURING FINAL DESIGN AND CONSTRUCTION TO ENSURE ACCESS DURING THE CONSTRUCTION PHASE.
12. USE OF TXDOT RIGHT-OF-WAY FOR PERMANENT IMPROVEMENTS WILL REQUIRED THE APPROPRIATE APPROVAL FROM TXDOT.

TYPICAL SECTIONS NOTES:

1. SECTIONS ILLUSTRATE TYPICAL REQUIREMENTS TO GUIDE CONCEPTUAL ENGINEERING DESIGN DEVELOPMENT. LOCATION SPECIFIC CONDITIONS WOULD ESTABLISH REQUIREMENTS AT EACH LOCATION AND OVERALL WIDTH OF LIMIT OF DISTURBANCE WOULD VARY AS IDENTIFIED ON DIMENSION LINES AND IN NOTES.
2. 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.
3. TYPICAL ROADWAY DRAINAGE SYSTEM PROVIDED AS SHOWN IN TYPICAL SECTIONS. LOCATION SPECIFIC CONFIGURATION AND SIZE WOULD BE ADVANCED DURING MORE DETAILED DESIGN.
4. LOCATION SPECIFIC CONDITIONS WOULD DICTATE FENCING REQUIREMENTS.
5. EMBANKMENT HEIGHTS AND CUT DEPTHS VARY WITH SURROUNDING GRADE AND RAIL PROFILE ELEVATION.
6. CRASH BARRIERS NOT SHOWN. LOCATION SPECIFIC CONDITIONS WILL DICTATE CRASH BARRIER REQUIREMENTS TO ENSURE SAFETY AND TO SATISFY APPLICABLE REGULATORY REQUIREMENTS.
7. SUBSURFACE GROUND IMPROVEMENTS ARE NOT SHOWN AND WILL BE BASED ON SITE SPECIFIC REQUIREMENTS.
8. RAIL HEIGHT VARIES WITH SURROUNDING GRADE AND RAIL PROFILE. THE BOTTOM OF SUBBALLAST SHALL BE NO LESS THAN 2FT ABOVE 100 YEAR FLOODPLAIN.

UTILITIES NOTES:

1. REFER TO THE FDCE REPORT FOR A LIST OF MAJOR UTILITY CROSSINGS, THEIR ASSUMED SIZE, AND ASSOCIATED LOCATIONS ALONG THE ALIGNMENT.
2. 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.
3. NO FIELD SURVEYS HAVE BEEN CONDUCTED TO LOCATE AND VERIFY UTILITY LOCATIONS.
4. NOT ALL EXISTING UNDERGROUND UTILITIES HAVE BEEN SHOWN. REFER TO THE FDCE REPORT FOR MAJOR UTILITIES INCLUDED IN PROJECT MAPPING.
5. 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. CUT-00-0100 FOR TYPICAL UTILITY CROSSING DETAILS. UTILITY LODS FOR FUTURE PROPOSED CONNECTIONS TO TPSS FACILITIES ARE SHOWN.
6. FOR PARALLEL TRANSMISSION LINE CROSSINGS OVER NEW ELEVATED ROADWAYS, A LOD IS SHOWN ON THE PLAN ONLY. REFER TO DRAWING NO. CUT-00-0100 FOR TYPICAL UTILITY CROSSING DETAILS.
7. MANY UTILITY CONFLICTS ALONG THE HEMPSTEAD ROAD CORRIDOR IN HOUSTON WOULD BE RESOLVED DURING FINAL DESIGN. A CONTINUOUS LOD IS SHOWN ON THE DRAWINGS TO REPRESENT THAT UTILITIES WOULD BE RELOCATED 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.
8. FOR UTILITY WORK REQUIRED BY UTILITY COMPANIES, EACH UTILITY OWNER WOULD DEVELOP THE DESIGN IN ACCORDANCE WITH APPLICABLE DESIGN STANDARDS AND REGULATORY AGENCY REVIEW PROCESSES.

DRAINAGE NOTES:

1. PROPOSED DETENTION BASIN LOCATIONS AND DIMENSIONS SHOWN ARE APPROXIMATE AND ARE INTENDED FOR PRELIMINARY PLANNING AND ENVIRONMENTAL IMPACT ANALYSIS PURPOSES ONLY. SITE SPECIFIC CONFIGURATIONS WOULD BE DEVELOPED DURING FINAL DESIGN IN ACCORDANCE WITH APPLICABLE REQUIREMENTS.
2. EXISTING CULVERTS ARE NOT SHOWN.
3. PROPOSED TRACK AND ROADWAY STORMWATER DRAINAGE WOULD BE DEVELOPED DURING FINAL DESIGN IN ACCORDANCE WITH APPLICABLE REQUIREMENTS. REFER TO TYPICAL SECTION DRAWINGS FOR PROPOSED CONFIGURATIONS.
4. EXISTING STORMWATER FACILITIES ARE NOT SHOWN.
5. TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) WATER QUALITY CRITERIA WOULD BE MET FOR STORMWATER RUNOFF AND PROTECTION OF EXISTING WATER RESOURCES.
6. CONSTRUCTION OF THE RAIL MAY REQUIRE THE RECONFIGURATION OF PONDS OR STOCK TANKS IMMEDIATELY ADJACENT TO THE RAIL CORRIDOR. IN CASES WHERE THE CURRENT DESIGN NECESSITATES A FULL RELOCATION OF THE POND, ALLOWANCES HAVE BEEN MADE WITHIN THE LOD. IN CASES WHERE 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:

1. 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 ANALYSIS.
2. APPROXIMATE HSR VIADUCT AND BRIDGE STRUCTURE LIMITS AND DEPTHS ARE SHOWN ON THE PROFILES TO SUPPORT ENVIRONMENTAL IMPACT ANALYSIS. LIMITS OF STRUCTURES AND EMBANKMENTS WOULD BE REFINED DURING FINAL DESIGN.
3. PLAN AND PROFILE DRAWINGS DO NOT SHOW LIMITS OF STRUCTURES IN PLAN VIEW. SITE SPECIFIC STRUCTURAL DESIGN WOULD BE DEVELOPED DURING FINAL ENGINEERING IN ACCORDANCE WITH APPLICABLE REQUIREMENTS. DESIGN OF FOUNDATIONS, ABUTMENTS, PIERS AND OTHER STRUCTURES WOULD BE DEVELOPED TO MITIGATE ANY IMPACTS IDENTIFIED THROUGH ENVIRONMENTAL ANALYSIS.
4. HSR PROFILE WAS DEVELOPED TO PROVIDE A MINIMUM 3FT 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.
5. SPECIAL STRUCTURES WOULD BE REQUIRED TO MITIGATE IMPACTS OR ADDRESS UNIQUE SITE SPECIFIC ISSUES SUCH AS LONG SPANS, CROSSOVER STRUCTURES, AND STRADDLE BENTS TO AVOID OR MITIGATE IMPACTS. THE CONSTRUCTABILITY REPORT IDENTIFIES SPECIAL STRUCTURE LOCATIONS. PLAN AND PROFILE DRAWINGS IDENTIFY ADDITIONAL LOD EXPECTED FOR CONSTRUCTION STAGING AND WORKING AREAS FOR SPECIAL STRUCTURES.

SYSTEMS GENERAL NOTES:

1. SYSTEMS SCHEMATICS, SHOWN ON SHEETS SYS-00-02000 THROUGH SYS-00-02005, SHOW LOCATIONS OF SYSTEMS FACILITIES THAT HAVE BEEN INCLUDED FOR EACH END-TO-END ALTERNATIVE.
2. AREA FOR SYSTEMS FACILITY SITES HAVE BEEN INCLUDED WITHIN THE PROJECT LOD. THESE AREAS ARE GENERICALLY CALLED OUT AS "RAIL SYSTEMS SITES" ON THE PLAN AND PROFILE SHEETS. REFER TO FDCE REPORT TO DETERMINE THE SPECIFIC FACILITY TYPE AT EACH INDIVIDUAL LOCATION.
3. TYPICAL LAYOUT PLANS FOR EACH OF THE SYSTEMS FACILITIES ARE INCLUDED IN SHEETS SYS-00-01000 THROUGH SYS-00-01002.
4. LOD DEVELOPED FOR ENVIRONMENTAL IMPACT ANALYSIS OF SYSTEMS SITES INCLUDED SPACE FOR A DRIVEWAY AND SPACE TO PARK A LIMITED NUMBER OF MAINTENANCE VEHICLES.
5. SYSTEMS BUILDINGS WOULD BE DETAILED DURING FINAL DESIGN TO CONSIDER SITE SPECIFIC CONDITIONS, BE CONTEXT SENSITIVE, AND MINIMIZE VISUAL IMPACT. THE RADIO MAST AT COMMUNICATION FACILITIES WOULD BE APPROXIMATELY 50FT (15M) ABOVE THE TOP OF RAIL ELEVATION.
6. TPSS WOULD BE CONNECTED TO THE NEAREST 138KV TRANSMISSION LINES DESIGNED BY UTILITY PROVIDER AND SUBJECT TO ENVIRONMENTAL REVIEW.

FACILITY NOTES:

1. PROPOSED HSR 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 COMMUNICATIONS HOUSES. LOCATIONS, LIMITS OF DISTURBANCE, AND AREAS SHOWN FOR THE VARIOUS PROPOSED FACILITIES ARE FOR PRELIMINARY PLANNING PURPOSES ONLY.
2. ALL FACILITIES WOULD BE POWERED FROM THE LOCAL UTILITY GRID.
3. ACCESS, SECURITY, AND UTILITY PROVISION REQUIREMENTS FOR ALL FACILITIES WOULD BE DETAILED DURING FINAL DESIGN.

CONSTRUCTION CONSIDERATION NOTES:

1. CONSTRUCTION REQUIREMENTS WERE CONSIDERED DURING DEVELOPMENT OF THE CONCEPTUAL ENGINEERING AND ARE DOCUMENTED IN THE PROJECT CONSTRUCTABILITY REPORT.
2. TEMPORARY CONSTRUCTION AREAS REQUIRED FOR CONSTRUCTION ACCESS, CONSTRUCTION STAGING, AND PRECASTING FACILITIES WERE IDENTIFIED DURING DEVELOPMENT OF THE CONCEPTUAL ENGINEERING. CONSTRUCTION STAGING AREAS AND PRECAST FACILITIES ARE INCLUDED IN THE PROJECT LOD.
3. SPECIAL STRUCTURES REQUIRED TO MITIGATE IMPACTS OR ADDRESS UNIQUE SITE SPECIFIC ISSUES SUCH AS LONG SPANS, CROSSOVER STRUCTURES, AND STRADDLE BENTS ARE IDENTIFIED IN THE CONSTRUCTABILITY REPORT.
4. MEASURES REQUIRED TO MITIGATE NOISE, TRAFFIC, AND OTHER ENVIRONMENTAL IMPACTS WOULD BE IDENTIFIED THROUGH THE ENVIRONMENTAL ANALYSES. MORE DETAILED DESIGN INCLUDING DEVELOPMENT OF MAINTENANCE AND PROTECTION OF TRAFFIC AND OTHER CONSTRUCTION SPECIFIC PLANS AND PROCEDURES WOULD BE REQUIRED TO SECURE APPLICABLE PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION WORKS.

REV	DATE	BY	CHK	APP	DESCRIPTION

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



Drawing Title GENERAL NOTES
Scale NO SCALE
Drawing Status FINAL DRAFT
Job No 234180
Drawing No GEN-00-00008
Rev 01

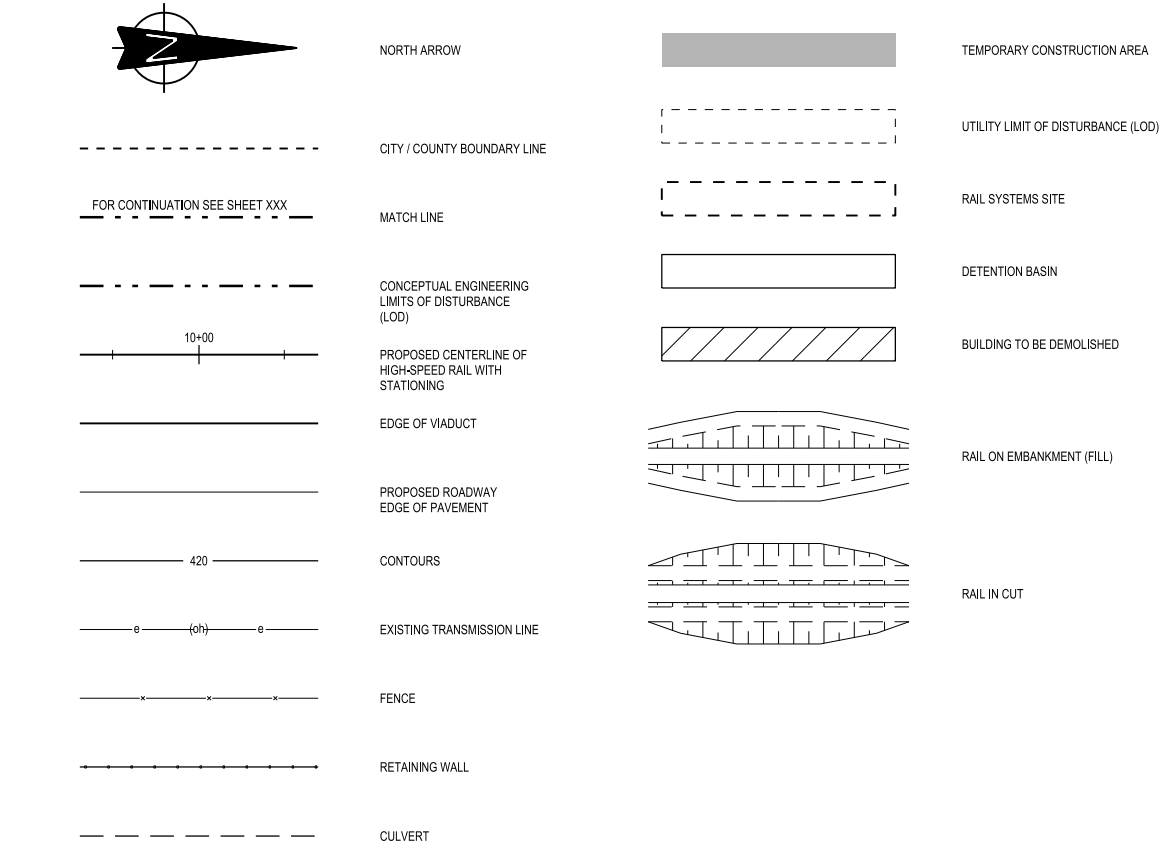
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Drawing Status FINAL DRAFT
Job No 234180
Drawing No GEN-00-00008
Rev 01

ABBREVIATIONS

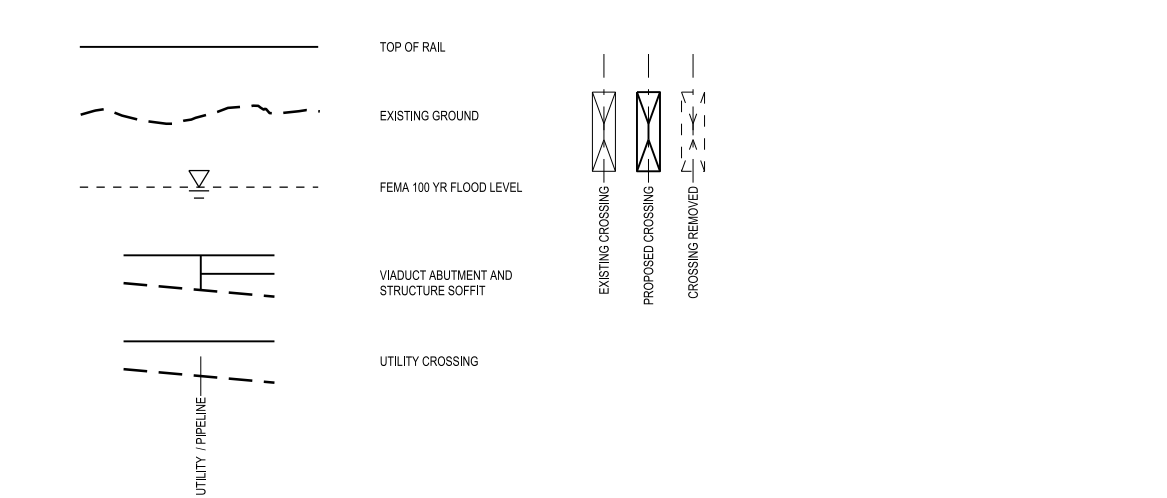
ALT	ALTERNATE ALIGNMENT	TBD	TO BE DETERMINED TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
APPROX	APPROXIMATE	TEMP	TEMPORARY
ATP	AUTOTRANSFORMER POST	TMF	TRAINSET MAINTENANCE FACILITY
AVE	AVENUE	TPSS	TRACTION POWER SUBSTATION
BLVD	BOULEVARD	TS	TANGENT SPIRAL
BNSF	BURLINGTON NORTH SANTE FE RAILROAD	TYP	TYPICAL
BOT	BOTTOM	TOR	TOP OF RAIL
CH	COMMUNICATION HOUSE	US	UNITED STATES, UNITED STATES HIGHWAY
CO RD	COUNTY ROAD	UPRR	UNION PACIFIC RAILROAD
CL	CENTERLINE	VAR	VARIABLE
C	CENTERLINE	VERT, V	VERTICAL
CO	COUNTY	WB	WESTBOUND
CR	COUNTY ROAD	WT	WEST OF TEAGUE
CS	CURVE TO SPIRAL	XING	CROSSING
CVL	CIVIL	YR	YEAR
DIA	DIAMETER		
DIST	DISTANCE, DISTRICT		
DR	DRIVE		
DRG	DRAWING		
DS	DALLAS SEGMENT		
DSN	DALLAS SEGMENT NORTH		
DSS	DALLAS SEGMENT SOUTH		
DT	DALLAS TERMINUS SEGMENT		
DWY	DRIVEWAY		
Ea	ACTUAL SUPERELEVATION		
EE	ELLIS EAST SEGMENT		
ELECT	ELECTRIC		
ELEV	ELEVATION		
EMB	EMBANKMENT		
ENGR	ENGINEER		
EPA	ENVIRONMENTAL PROTECTION AGENCY		
Eu	UNBALANCED SUPERELEVATION		
EW	ELLIS WEST SEGMENT		
EXIST, EX.	EXISTING EXTERIOR		
EXT			
FDN	FOUNDATION		
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY		
FG	FINISHED GRADE		
FIG	FIGURE		
FL	FLOW LINE		
FM	FARM TO MARKET ROAD		
FRS	FREIGHT RAIL SIDING		
FTG	FOOTING		
FWY	FREEWAY		
G	GRADIENT		
GEN	GENERAL		
H	HEIGHT, HIGHWAY BRIDGE		
HN	HOUSTON SEGMENT		
HNN	HOUSTON SEGMENT NORTH		
HNS	HOUSTON SEGMENT SOUTH		
HORIZ, H	HORIZONTAL		
HRW	HIGHWAY RETAINING WALL		
HSR	HIGH SPEED RAIL		
HT	HOUSTON TERMINUS SEGMENT		
HWY	HIGHWAY		
IH	INTERSTATE HIGHWAY		
ISH	INTERMEDIATE SIGNAL HOUSE		
KV	KILOVOLT		
L	LENGTH		
LN	LANE		
LOD	LIMITS OF DISTURBANCE		
LVC	LENGTH OF VERTICAL CURVE		
MAINT	MAINTENANCE		
MAX	MAXIMUM		
MOW	MAINTENANCE-OF-WAY		
MIN	MINIMUM		
MISC	MISCELLANEOUS		
MPH	MILES PER HOUR		
MSH	MAIN SIGNAL HOUSE		
NB	NORTHBOUND		
NE	NAVARRO EAST SEGMENT		
NED	NATIONAL ELEVATION DATASET		
NHD	NATIONAL HYDROGRAPHY DATASET		
NLCD	NATIONAL LAND COVER DATASET		
NO	NUMBER		
NTS	NOT TO SCALE		
N/A	NOT APPLICABLE		
NW	NAVARRO WEST SEGMENT, NOISE WALL		
NWI	NATIONAL WETLANDS INVENTORY		
NWIH	PORTION OF NAVARRO WEST ASSOCIATED WITH IH-45 SEGMENT		
OCS	OVERHEAD CATENARY SYSTEM		
OD	OUTSIDE DIAMETER		
OG	ORIGINAL GRADE		
OH	OVERHEAD		
OPP	OPPOSITE		
PKWY	PARKWAY		
POB	POINT OF BEGINNING		
POE	POINT OF END		
PVMT	PAVEMENT		
PVC	POINT VERTICAL CURVATURE		
PVI	POINT VERTICAL INTERSECTION		
PVT	POINT VERTICAL TANGENT		
R	RADIUS, RAIL BRIDGE		
RD	ROAD		
RDWY	ROADWAY		
RM	RANCH TO MARKET ROAD		
ROW	RIGHT OF WAY		
RR, R/R	RAILROAD		
RTE	ROUTE		
RWY	RAILWAY		
SC	SPIRAL CURVE		
SH	STATE HIGHWAY		
SO	SIDING OFF		
SP	SECTIONING POST		
SSH	SUB-SIGNAL HOUSE		
SSP	SUB-SECTIONING POST		
ST	STREET, SPIRAL TO TANGENT		
STA	STATION		
STD	STANDARD		
SYM	SYMMETRICAL		

LEGEND

PLAN



PROFILE



NOTE:

1. FOR ADDITIONAL DETAIL REGARDING INFORMATION SHOWN ON DRAWINGS, SEE RAIL ANNOTATION TO CLARIFY DESIGN INTENT, DRAWING GEN-00-00010. SEE ROAD ANNOTATION TO CLARIFY DESIGN INTENT, DRAWING GEN-00-00011.

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DRAWN BY	D. THOMPSON
CHECKED BY	R. BURNS
IN CHARGE	C. TAYLOR
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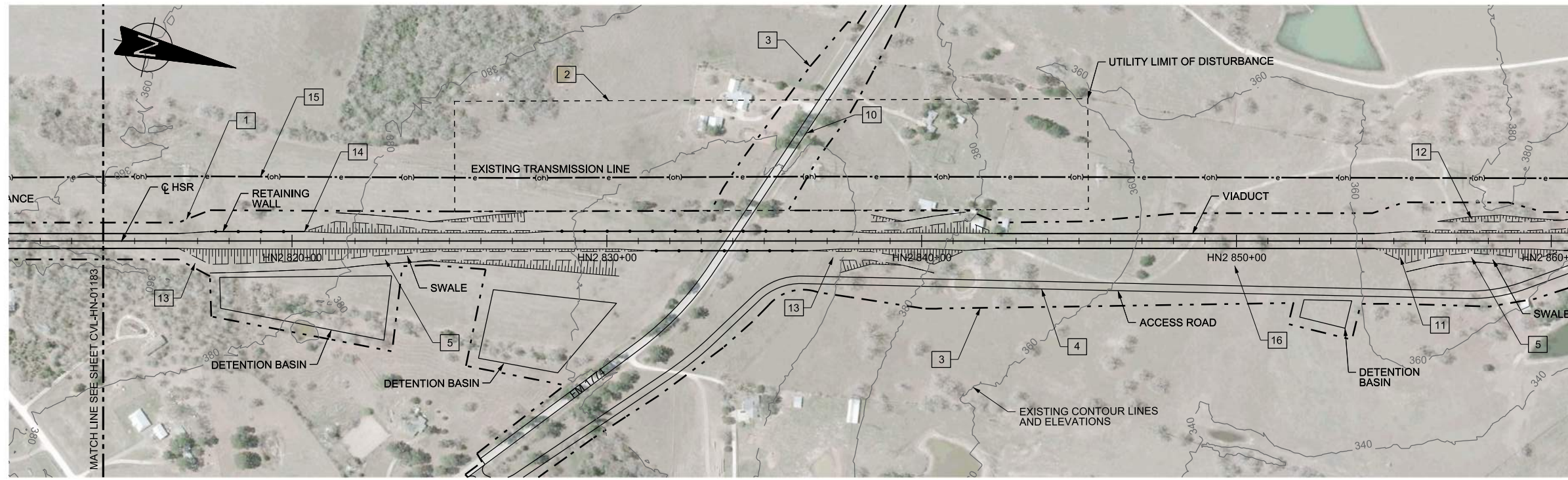


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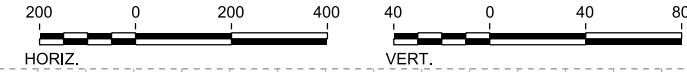


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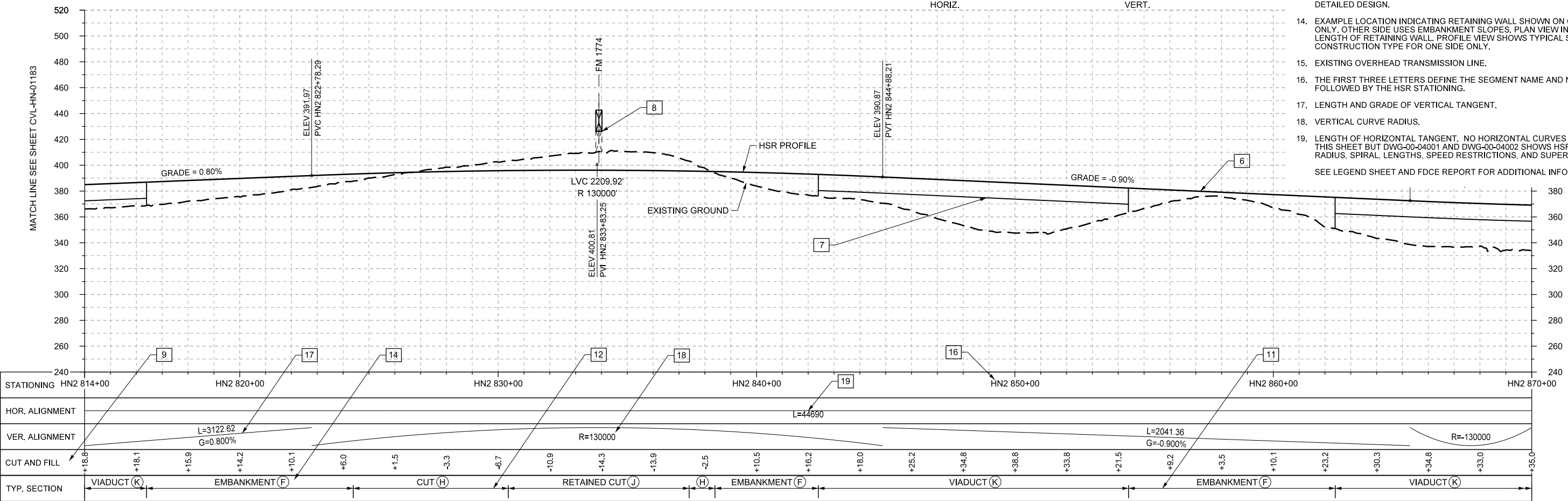
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Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	GEN-00-00009
Rev	01



PLAN



- NOTES:
- LIMIT OF DISTURBANCE (LOD) FOR THE PROJECT. LOD VARIES BASED ON IMPACT AT EACH LOCATION LOD 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 ACCOMMODATE SIDE SLOPES ASSOCIATED WITH THE GRADE SEPARATION 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 OF SWALES WOULD BE DEVELOPED DURING FINAL DESIGN AND BE BASED 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 VIADUCT STRUCTURES. TYPICAL STRUCTURE DEPTH SHOWN.
 - CLEARANCE BOX INDICATING GRADE SEPARATION BETWEEN RAIL AND ROADWAY ALIGNMENT. CLEARANCE BOX SHOWS APPROXIMATE SPACE OCCUPIED BY EXISTING OR PROPOSED ROADWAYS OR FREIGHT RAIL LINES. FOR DETAILS ON REQUIRED CLEARANCES REFER TO FDCE REPORT.
 - CUT AND FILL VALUES SHOW HEIGHT OF HSR PROFILE AT THE TOP OF RAIL ELEVATION RELATIVE TO GROUND. CUT AND FILL IS CUSTOMARY NOMENCLATURE. HOWEVER VALUES ARE NOT INTENDED TO PROVIDE DEPTHS OF EXCAVATIONS OR HEIGHTS OF EARTHWORKS. WHERE TOP OF RAIL IS WITHIN 6 FEET OF EXISTING GROUND A CUT SECTION MAY BE REQUIRED TO ACCOMMODATE DEPTH OF TRACK STRUCTURE AND DRAINAGE. LIMITS WILL VARY BY LOCATION AND SITE SPECIFIC TOPOGRAPHY. 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 LENGTH OF RETAINING WALL. PROFILE VIEW SHOWS TYPICAL SECTION 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 DWG-00-04001 AND DWG-00-04002 SHOWS HSR CURVE RADIUS, SPIRAL, LENGTHS, SPEED RESTRICTIONS, AND SUPERELEVATIONS. SEE LEGEND SHEET AND FDCE REPORT FOR ADDITIONAL INFORMATION.



PROFILE

DESIGNED BY J. ENRIQUEZ
DRAWN BY P. TONKIN
CHECKED BY R. BURNS
IN CHARGE C. TAYLOR
DATE 09/15/2017

REV	DATE	BY	CHK	APP	DESCRIPTION

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Client
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
GENERAL

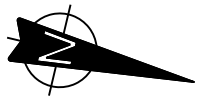
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Scale
AS SHOWN

Drawing Status
FINAL DRAFT

Job No 234180	Drawing No GEN-00-00010	Rev 01
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2-2
WEST OF TEAGUE SEGMENT



CR 124

CR 114

GRIMES
MADISON

NEW

STRAWTHIER

RED OAK

OXFORD CEMETERY

FM 1452

CVL-WT-01254

CVL-WT-01255

CVL-WT-01256

CVL-WT-01257

CVL-WT-01258

CVL-WT-01259

CVL-WT-01260

CVL-WT-01261

CVL-WT-01262

CVL-WT-01263

FOR CONTINUATION - SEE HOUSTON SEGMENT

CR 119

BETHEL CEMETERY

BUSA

FM 1372

STRAWTHIER

US 190 / IH-14

FOR CONTINUATION - SEE BELOW



FOR CONTINUATION - SEE ABOVE

CALDWELL

FM 978

POTEET

BATSON

COLE

FM 2289

DAWKINS

MADISON

NEW LEON

SH CSR

SKAINS

CR 403

CR 408

CVL-WT-01264

CVL-WT-01265

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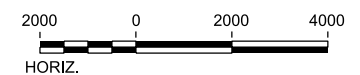
CVL-WT-01273

BRIDGES

FM 978

SPARROW

FOR CONTINUATION - SEE CVL-WT-01251



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

ARUP

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Client

TEXAS CENTRAL

1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

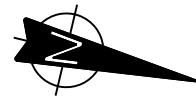
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**WEST OF TEAGUE SEGMENT
CIVIL
KEY MAP - SHEET 1 OF 4
WT 10+00 TO WT 1130+00**

Scale
AS SHOWN

Drawing Status
FINAL DRAFT

Job No	Drawing No	Rev
234180	CVL-WT-01250	01

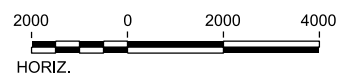
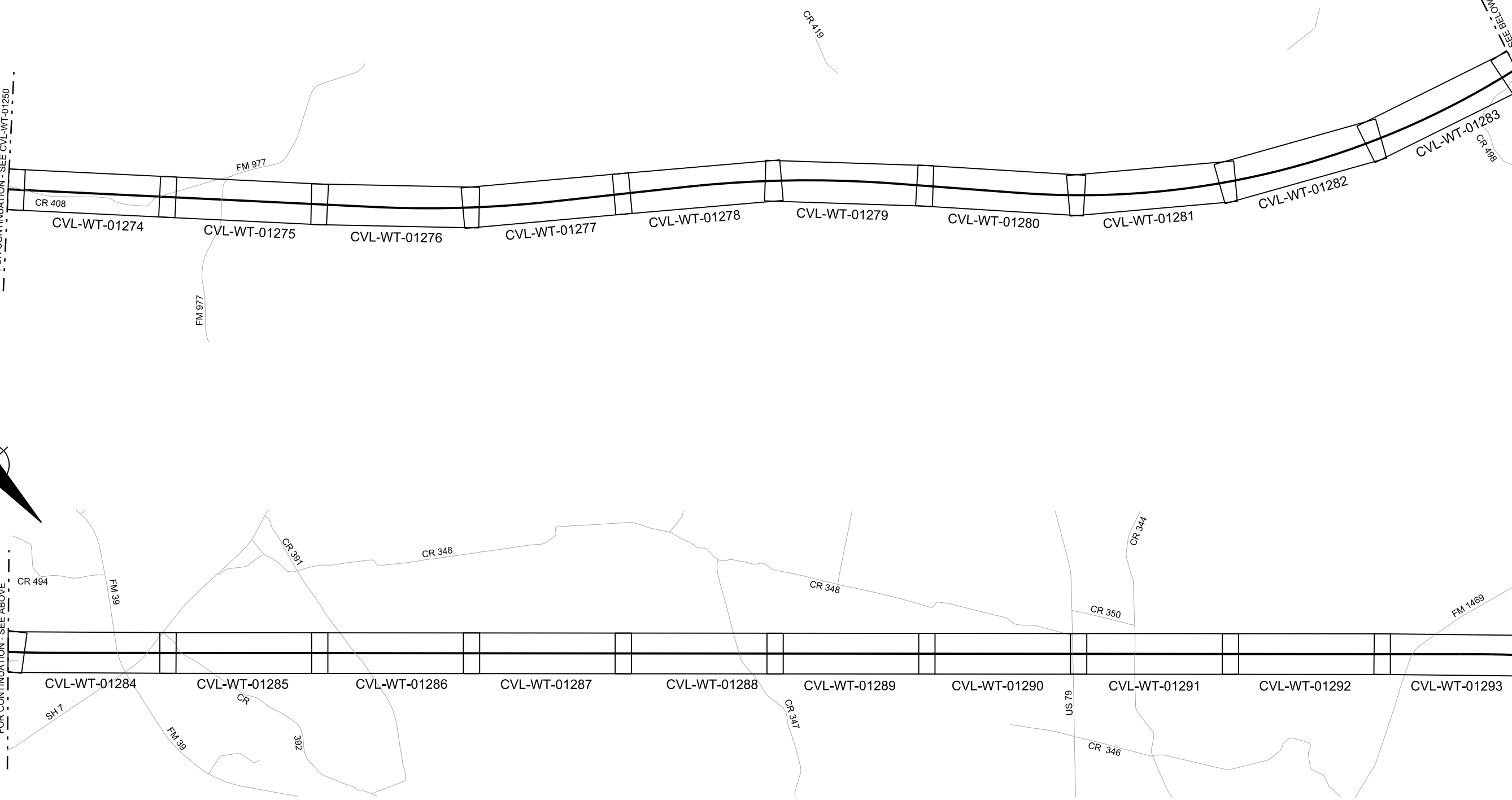


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FOR CONTINUATION - SEE ABOVE

FOR CONTINUATION - SEE BELOW

FOR CONTINUATION - SEE CVL-WT-01252



REV	DATE	BY	CHK	APP	DESCRIPTION

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CHECKED BY
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DATE
09/15/2017



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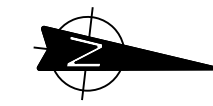
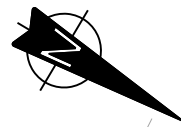
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Client
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Drawing Title
**WEST OF TEAGUE SEGMENT
CIVIL
KEY MAP - SHEET 2 OF 4
WT 1130+00 TO WT 2250+00**

Scale AS SHOWN		
Drawing Status FINAL DRAFT		
Job No 234180	Drawing No CVL-WT-01251	Rev 01

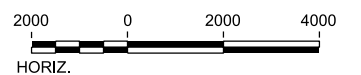
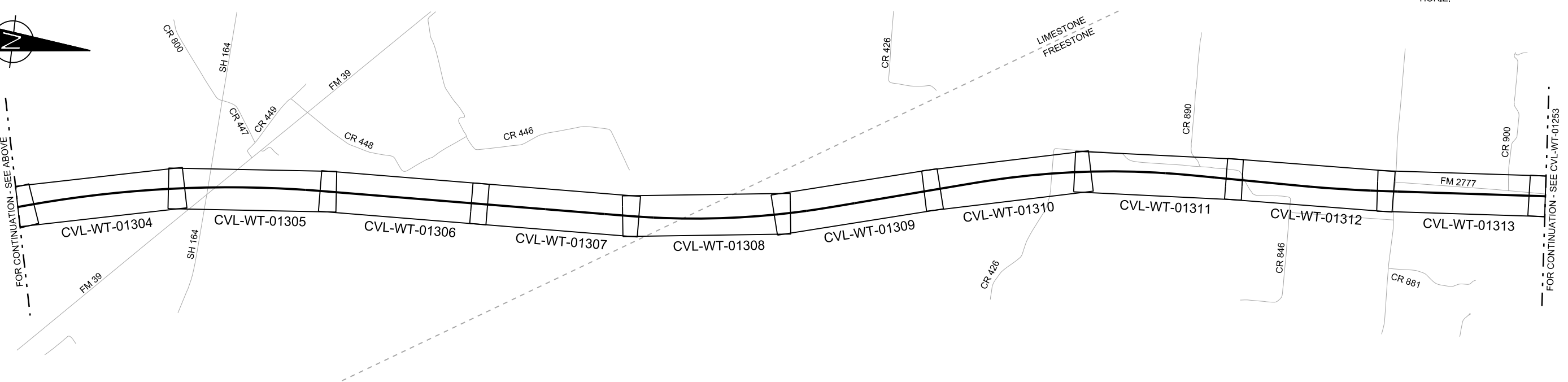
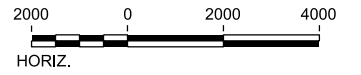
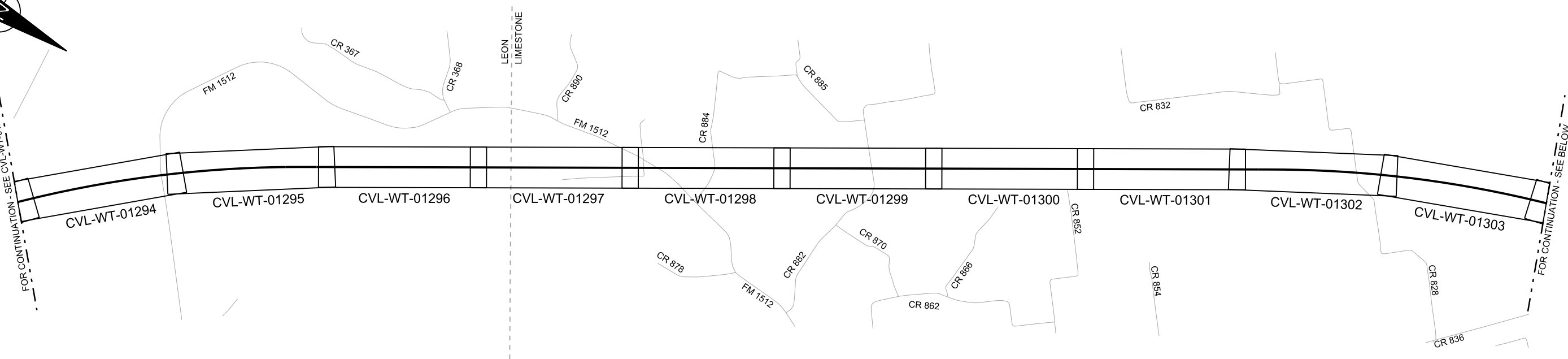


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FOR CONTINUATION - SEE BELOW

FOR CONTINUATION - SEE ABOVE

FOR CONTINUATION - SEE CVL-WT-01253



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
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CHECKED BY
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IN CHARGE
C. TAYLOR

DATE
09/15/2017



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Client

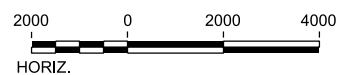
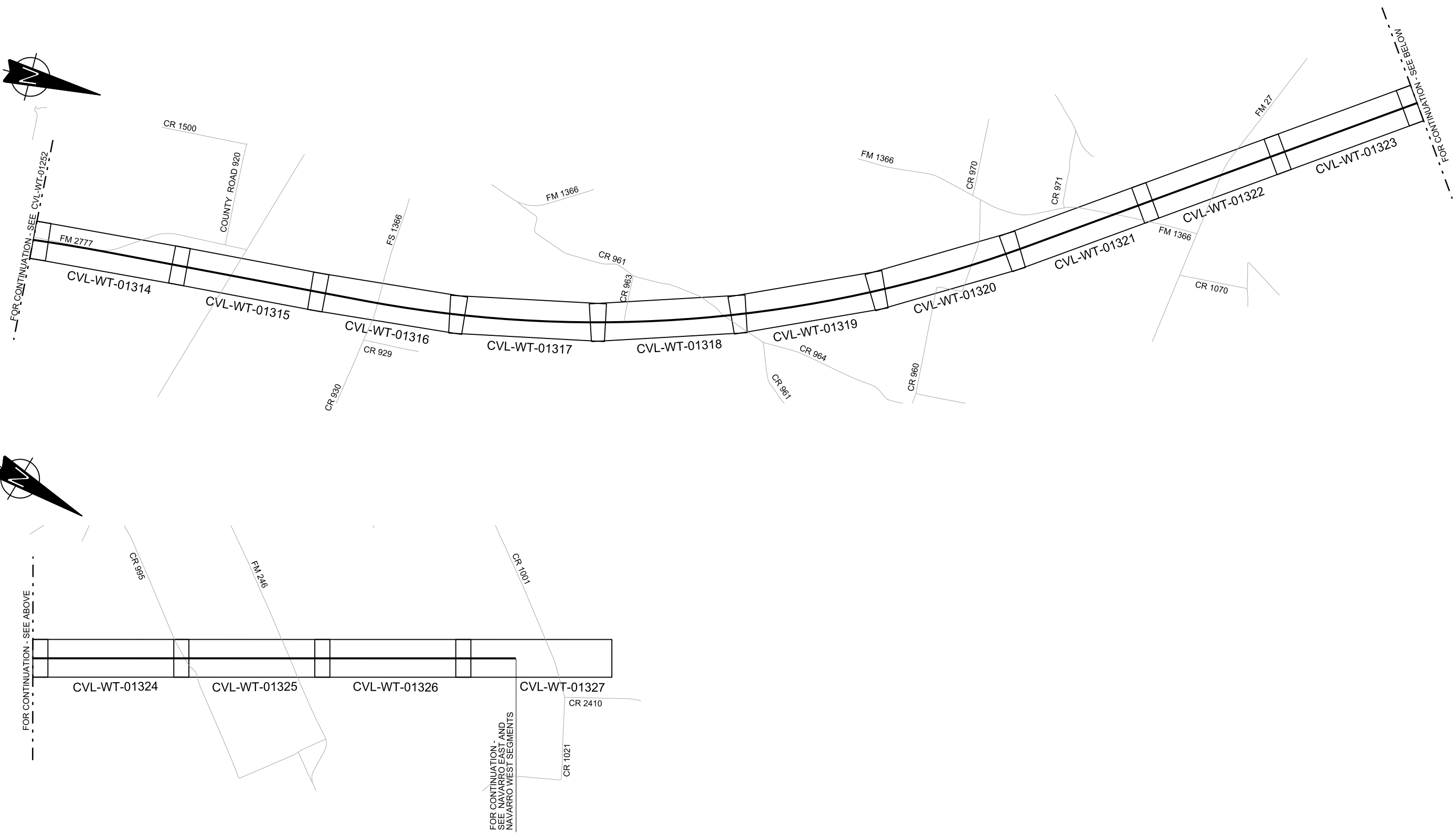
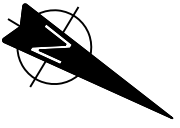
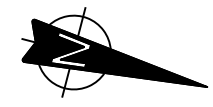


TEXAS CENTRAL

1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**WEST OF TEAGUE SEGMENT
CIVIL
KEY MAP - SHEET 3 OF 4
WT 2250+00 TO WT 3370+00**

Scale AS SHOWN		
Drawing Status FINAL DRAFT		
Job No 234180	Drawing No CVL-WT-01252	Rev 01



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
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CHECKED BY
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IN CHARGE
C. TAYLOR

DATE
09/15/2017



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Texas Registered Engineering Firm: F-2144

Client

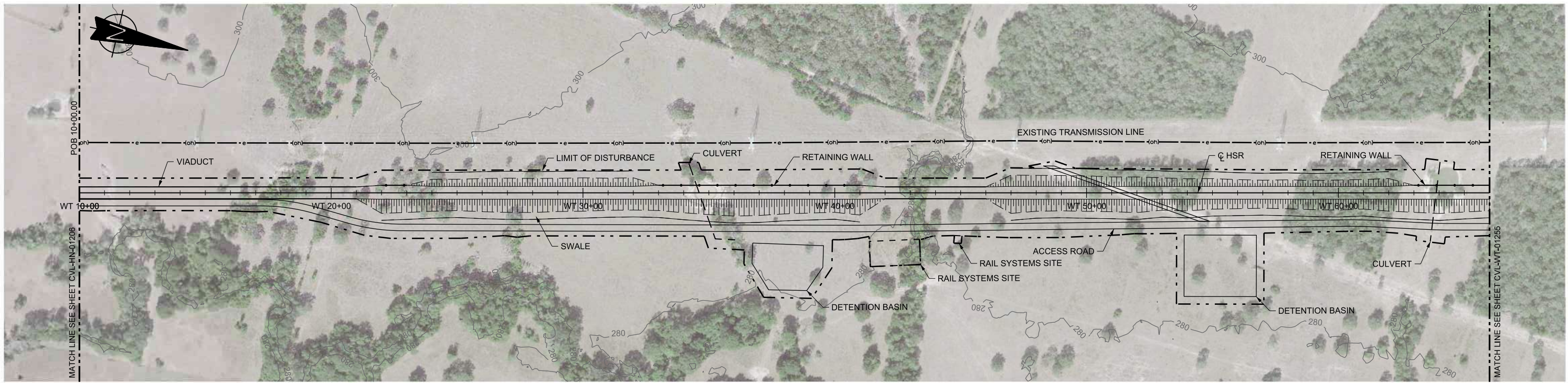


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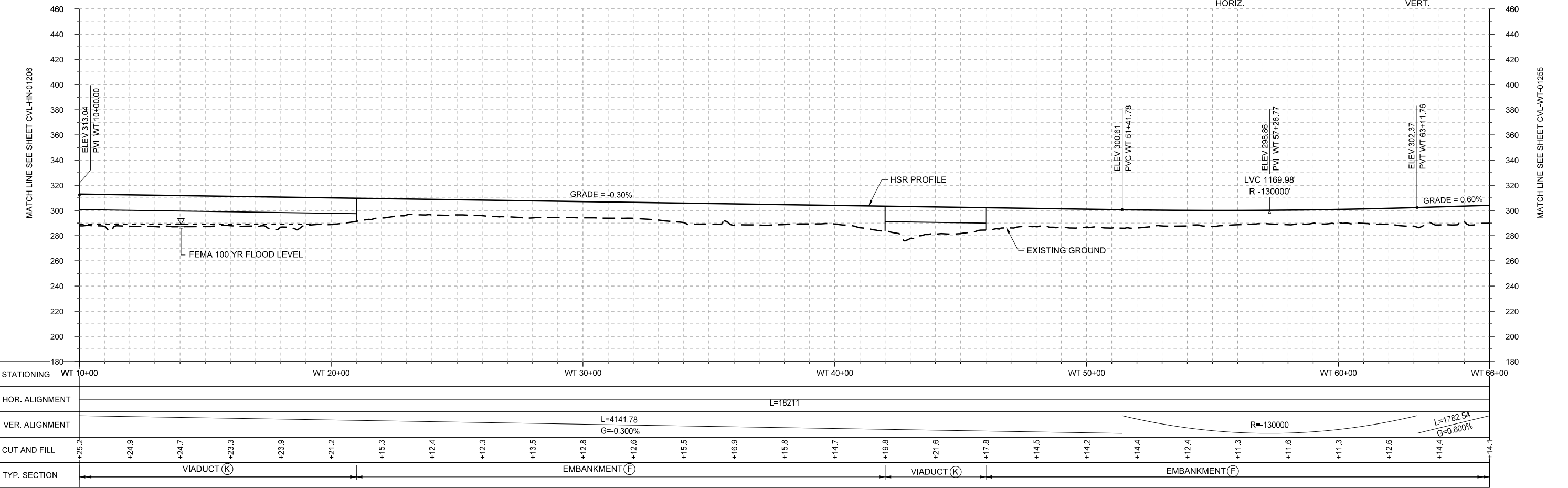
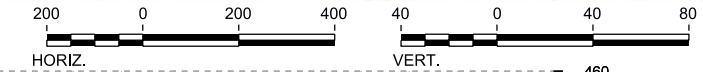
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**WEST OF TEAGUE SEGMENT
CIVIL
KEY MAP - SHEET 4 OF 4
WT 3370+00 TO WT 4118+87**

Scale AS SHOWN		
Drawing Status FINAL DRAFT		
Job No 234180	Drawing No CVL-WT-01253	Rev 01



PLAN



PROFILE

STATIONING	WT 10+00	WT 20+00	WT 30+00	WT 40+00	WT 50+00	WT 60+00	WT 66+00
HOR. ALIGNMENT	L=18211						
VER. ALIGNMENT	L=4141.78 G=-0.300%						
CUT AND FILL	+25.2	+24.9	+24.7	+23.3	+23.9	+21.2	+15.3
TYP. SECTION	VIADUCT (K)			EMBANKMENT (F)		VIADUCT (K)	
	+12.4	+12.3	+13.5	+12.8	+12.6	+15.5	+15.9
	+14.4	+11.3	+11.6	+11.3	+12.6	+14.4	+14.1
	EMBANKMENT (F)			EMBANKMENT (F)			

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
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FREESSE AND NICHOLS

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

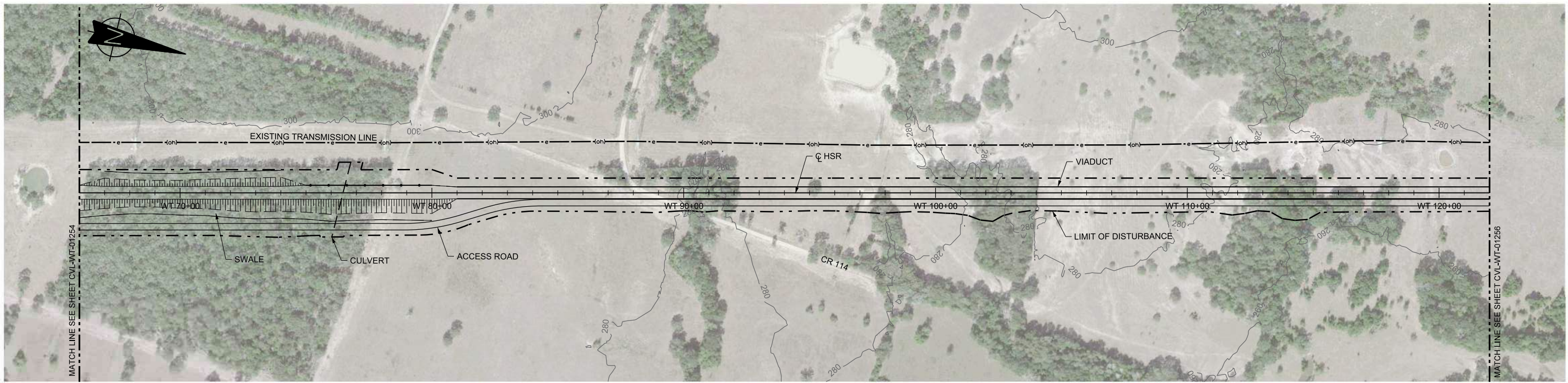
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TEXAS CENTRAL

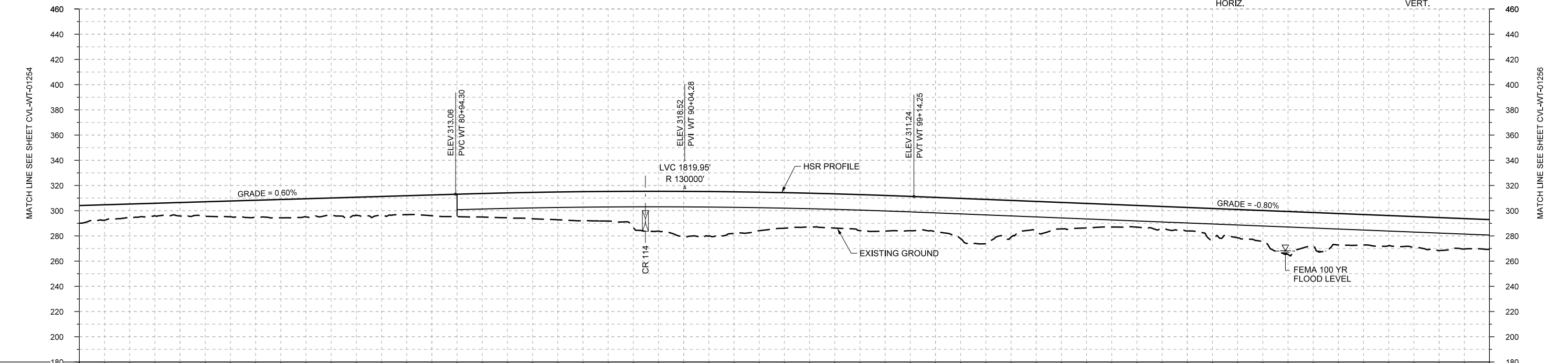
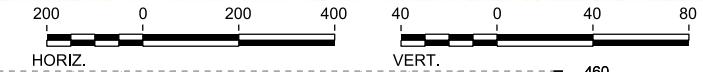
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 10+00 TO WT 66+00**

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01254
Rev	01



PLAN



PROFILE

STATIONING	WT 66+00	WT 70+00	WT 80+00	WT 90+00	WT 100+00	WT 110+00	WT 120+00	WT 122+00																					
HOR. ALIGNMENT	L=18211																												
VER. ALIGNMENT	L=1782.54 G=0.600%			R=130000			L=3852.82 G=-0.800%																						
CUT AND FILL	+14.1	+11.1	+10.7	+12.5	+14.5	+13.9	+14.7	+16.5	+18.7	+20.9	+22.9	+28.8	+36.1	+33.0	+26.2	+27.2	+28.3	+27.4	+35.2	+23.7	+19.4	+17.3	+18.7	+22.5	+34.1	+25.0	+24.0	+25.2	+23.6
TYP. SECTION	EMBANKMENT (F)										VIADUCT (K)																		

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

ARUP
 Arup Texas, Inc.
 10370 Richmond Ave., Suite 475
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 Tel (713) 783 2787 Fax (713) 343 1467
 www.arup.com
 Texas Registered Engineering Firm: F-1990

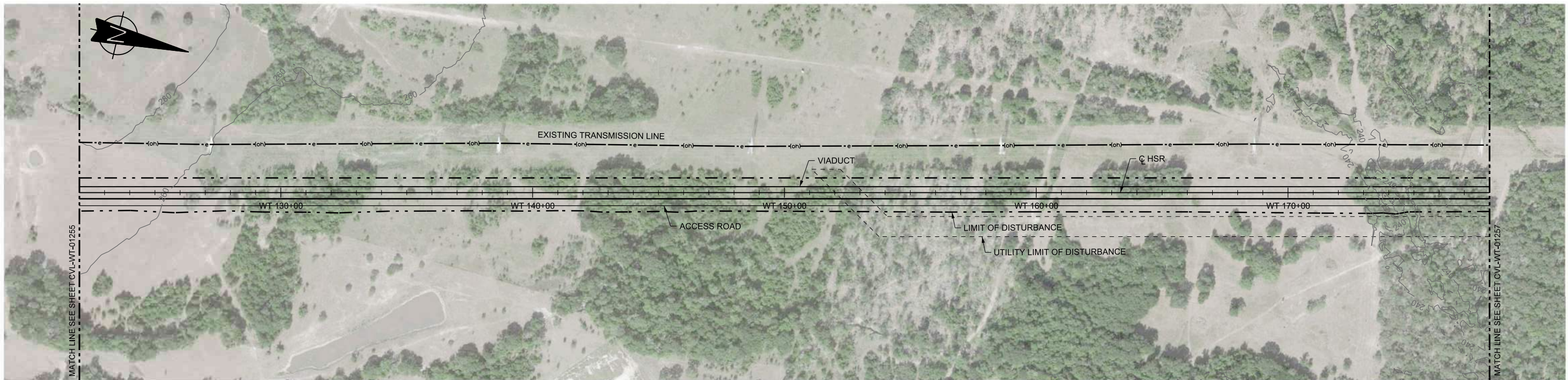
FRESE AND NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

Client

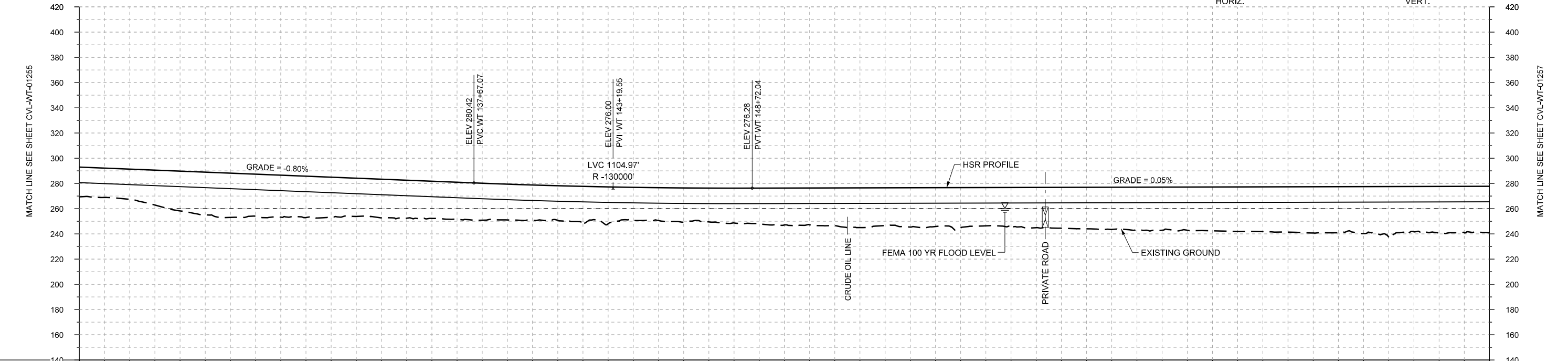
TEXAS CENTRAL
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 66+00 TO WT 122+00

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	Drawing No	Rev	
234180	CVL-WT-01255	01	



PLAN



PROFILE

STATIONING	WT 122+00	WT 130+00	WT 140+00	WT 150+00	WT 160+00	WT 170+00	WT 178+00																						
HOR. ALIGNMENT	L=18211																												
VER. ALIGNMENT	L=3852.82 G=-0.800%			R=130000		L=9430.20 G=0.050%																							
CUT AND FILL	+23.6	+24.0	+31.6	+35.1	+33.3	+31.1	+30.6	+29.5	+29.4	+28.0	+28.8	+25.6	+27.1	+27.6	+29.2	+29.8	+29.9	+30.8	+30.3	+31.9	+32.9	+33.6	+34.2	+35.3	+35.9	+36.5	+40.1	+37.0	+36.6
TYP. SECTION	VIADUCT (K)																												

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017



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10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
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www.arup.com
Texas Registered Engineering Firm: F-1990



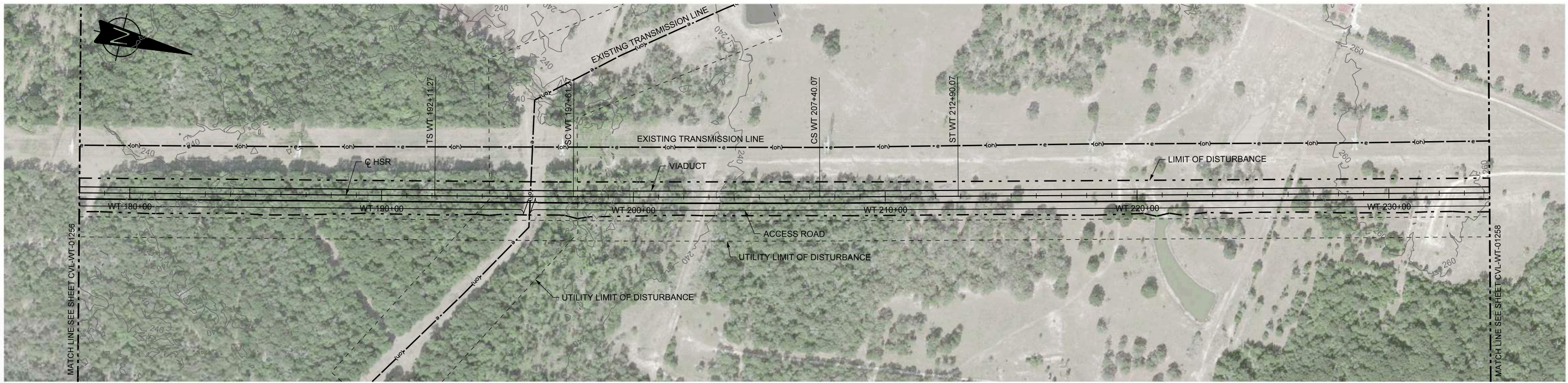
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
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Texas Registered Engineering Firm: F-2144



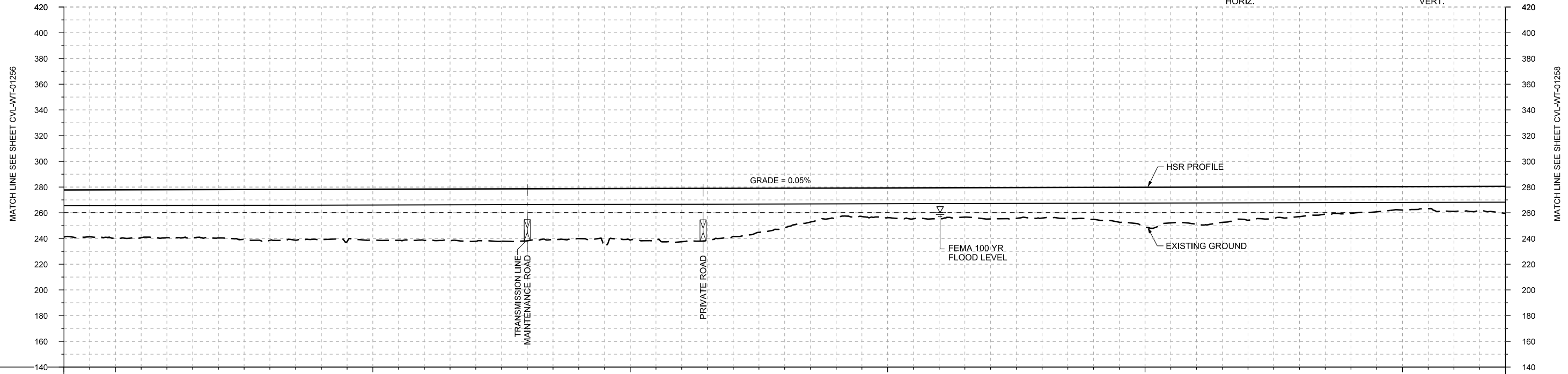
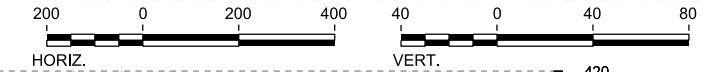
Client
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 122+00 TO WT 178+00**

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	234180	Drawing No	CVL-WT-01256
Rev			01



PLAN



PROFILE

STATIONING	WT 178+00	WT 180+00		WT 190+00		WT 200+00		WT 210+00		WT 220+00		WT 230+00	WT 234+00																
HOR. ALIGNMENT	L=18211				L=550		R=-105000 L=979		L=9430.20		L=550		L=13284																
VER. ALIGNMENT	G=0.050%																												
CUT AND FILL	+36.6	+37.8	+37.3	+37.6	+39.5	+38.9	+39.6	+39.8	+40.6	+40.4	+38.8	+40.0	+41.4	+37.5	+30.6	+23.0	+23.1	+24.1	+24.3	+23.7	+24.9	+30.9	+29.0	+25.8	+23.0	+20.7	+18.1	+19.4	+20.9
TYP. SECTION	VIADUCT (K)																												

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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www.freese.com
Texas Registered Engineering Firm: F-2144

Client

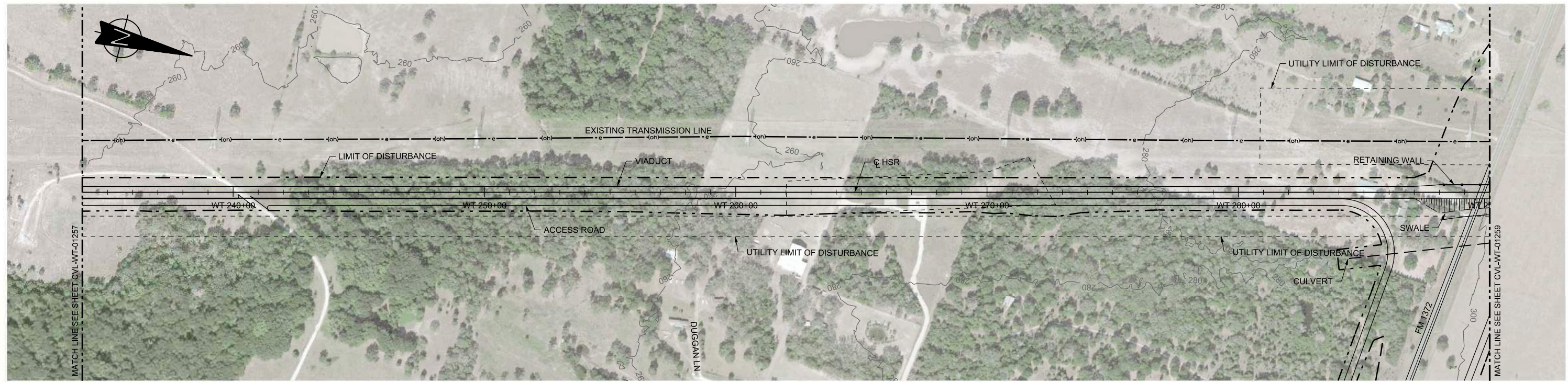
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1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

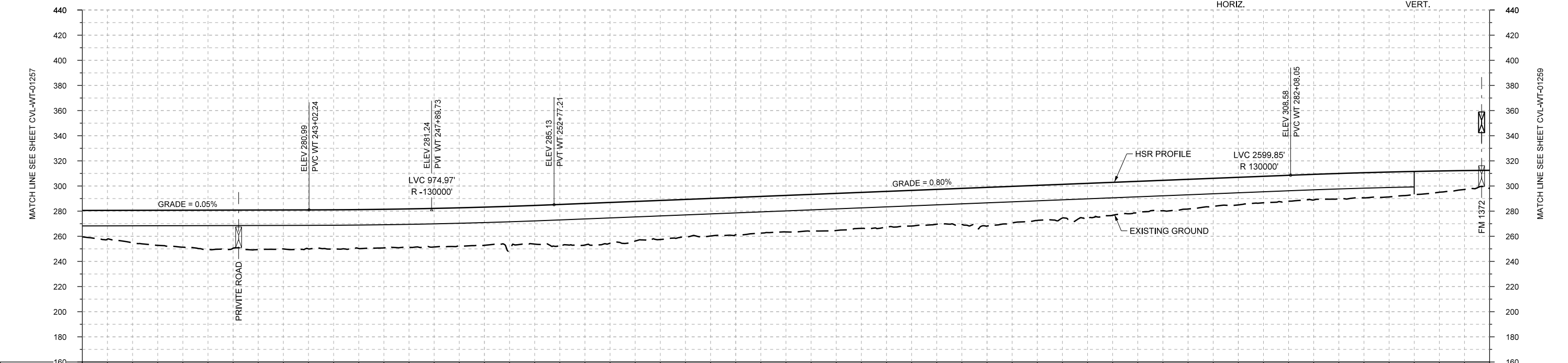
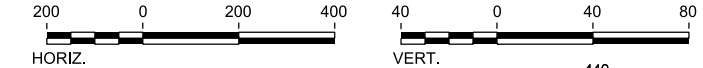
Drawing Title

**WEST OF TEAGUE SEGMENT
CIVIL
PLAN AND PROFILE
WT 178+00 TO WT 234+00**

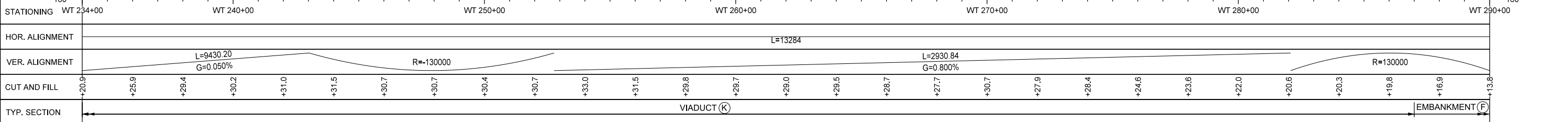
Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	Drawing No	Rev	
234180	CVL-WT-01257	01	



PLAN



PROFILE



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

REV	DATE	BY	CHK	APP	DESCRIPTION

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Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

Client

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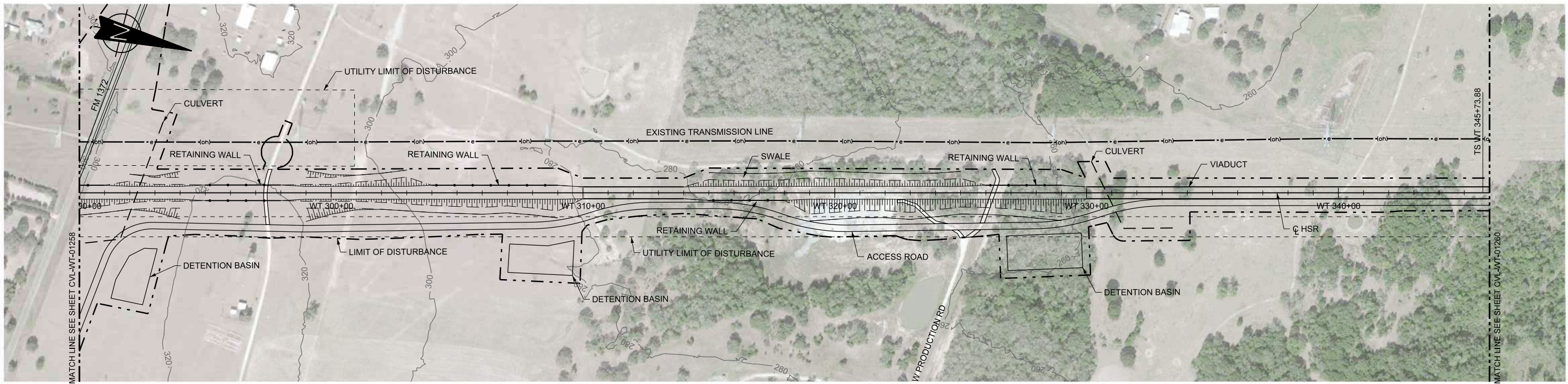
Drawing Title

**WEST OF TEAGUE SEGMENT
CIVIL
PLAN AND PROFILE
WT 234+00 TO WT 290+00**

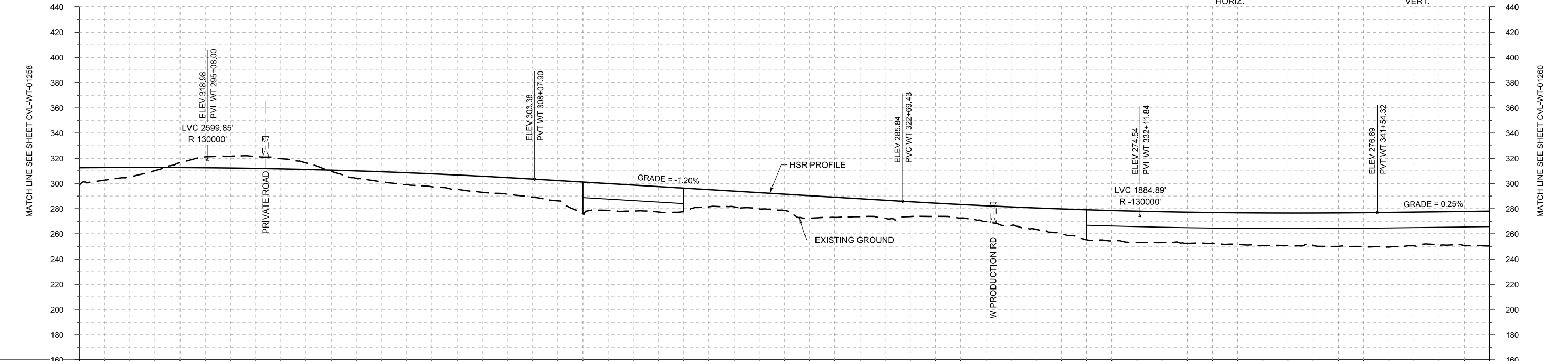
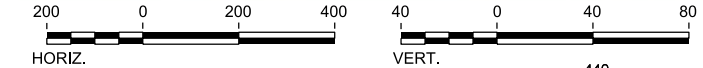
Scale
AS SHOWN

Drawing Status
FINAL DRAFT

Job No 234180	Drawing No CVL-WT-01258	Rev 01
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PLAN



PROFILE

STATIONING	WT 290+00	WT 300+00	WT 310+00	WT 320+00	WT 330+00	WT 340+00	WT 346+00
HOR. ALIGNMENT	L=13284						L=1150
VER. ALIGNMENT	R=130000		L=1461.53 G=-1.200%			R=-130000	
CUT AND FILL	+13.8	+7.3	-3.8	-9.3	-8.1	+1.0	+8.0
TYP. SECTION	(F)	CUT (H)	RETAINED CUT (J)	CUT (H)	EMBANKMENT (F)	VIADUCT (K)	EMBANKMENT (F)

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

ARUP

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Houston, Texas 77042 USA
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2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freesse.com
Texas Registered Engineering Firm: F-2144

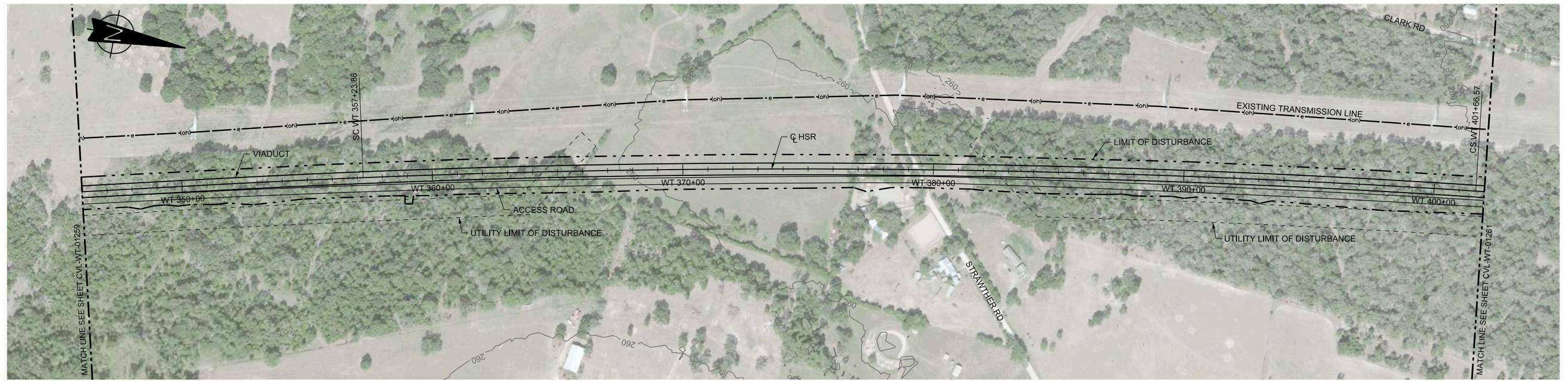
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TEXAS CENTRAL

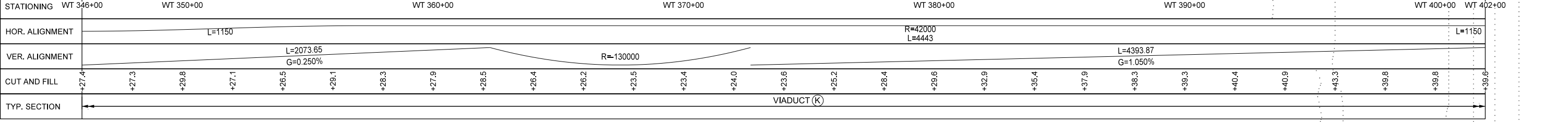
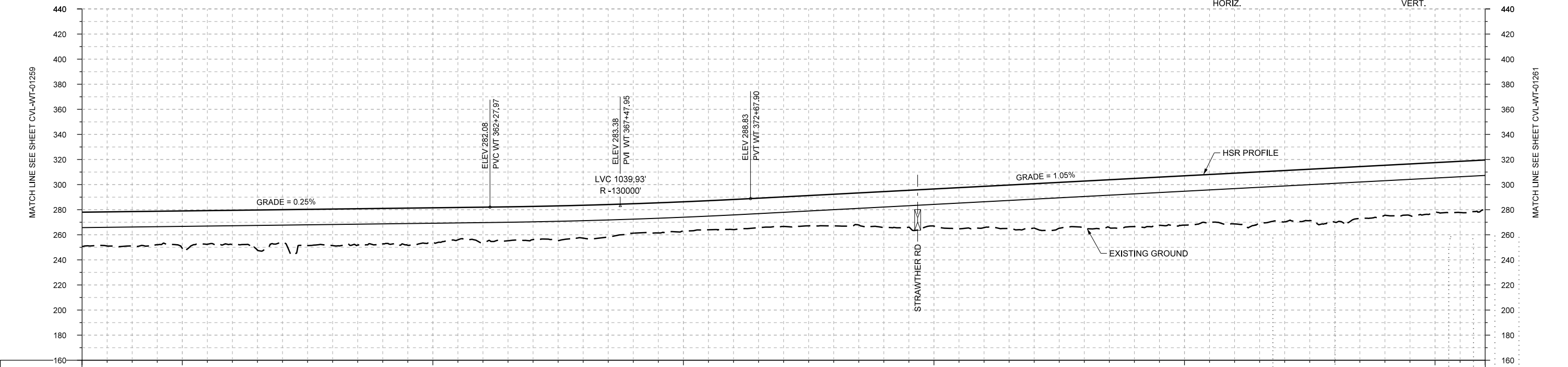
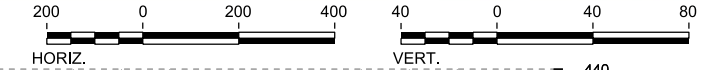
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**WEST OF TEAGUE SEGMENT
CIVIL
PLAN AND PROFILE
WT 290+00 TO WT 346+00**

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01259
Rev	01



PLAN



PROFILE

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

REV	DATE	BY	CHK	APP	DESCRIPTION

ARUP
 Arup Texas, Inc.
 10370 Richmond Ave., Suite 475
 Houston, Texas 77042 USA
 Tel (713) 783 2787 Fax (713) 343 1467
 www.arup.com
 Texas Registered Engineering Firm: F-1990

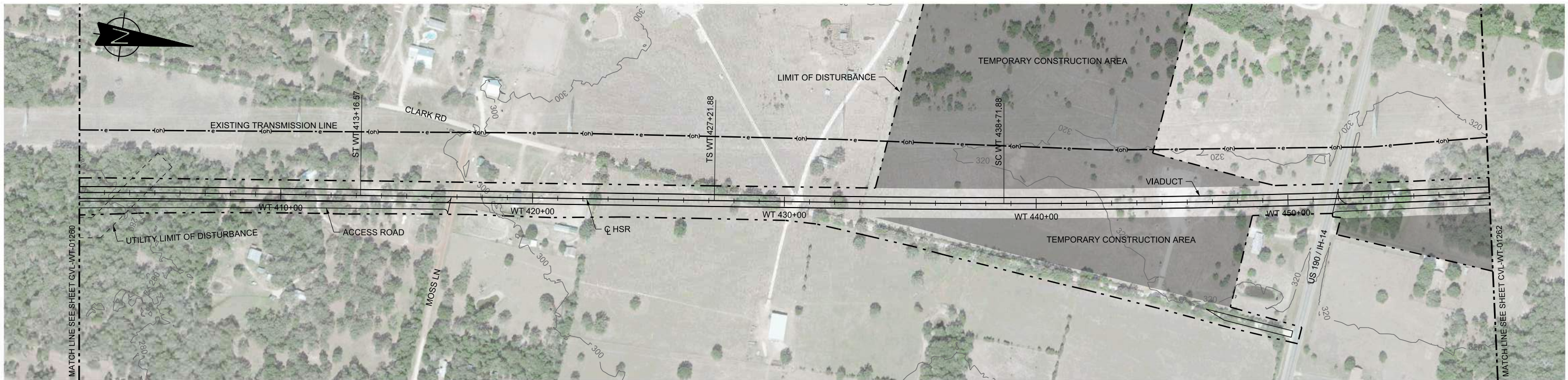
FREESSE AND NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

Client

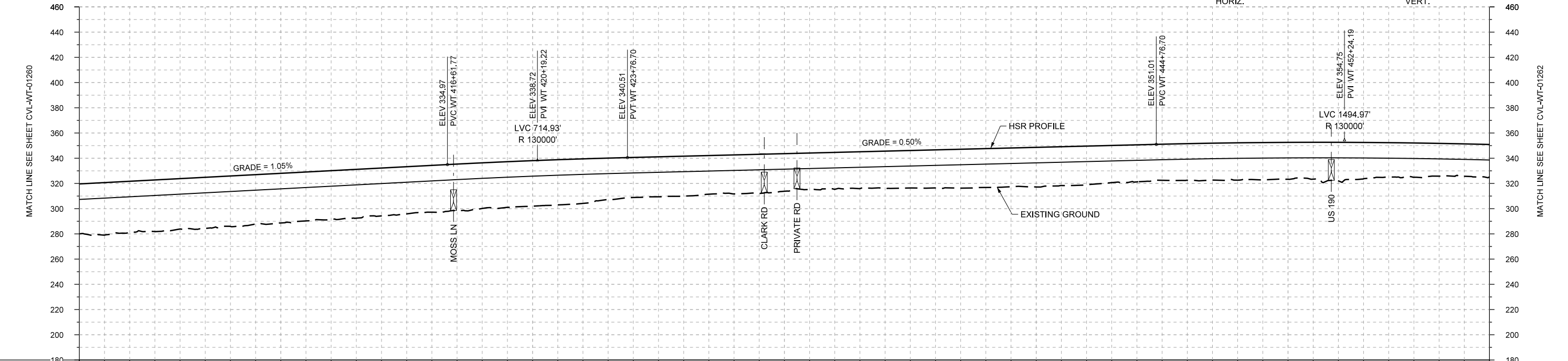
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 346+00 TO WT 402+00

Scale
 AS SHOWN
 Drawing Status
FINAL DRAFT
 Job No. 234180 Drawing No. CVL-WT-01260 Rev 01



PLAN



PROFILE

STATIONING	WT 402+00	WT 410+00	WT 420+00	WT 430+00	WT 440+00	WT 450+00	WT 458+00
HOR. ALIGNMENT	L=1150		L=1405		L=1150		
VER. ALIGNMENT	L=4393.87 G=1.050%		R=130000		L=2100.00 G=0.500%		R=42000 L=3791
CUT AND FILL	+39.6	+40.3	+39.9	+40.0	+39.3	+38.8	+37.9
TYP. SECTION	VIADUCT (K)						

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

ARUP
 Arup Texas, Inc.
 10370 Richmond Ave., Suite 475
 Houston, Texas 77042 USA
 Tel (713) 783 2787 Fax (713) 343 1467
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 Texas Registered Engineering Firm: F-1990

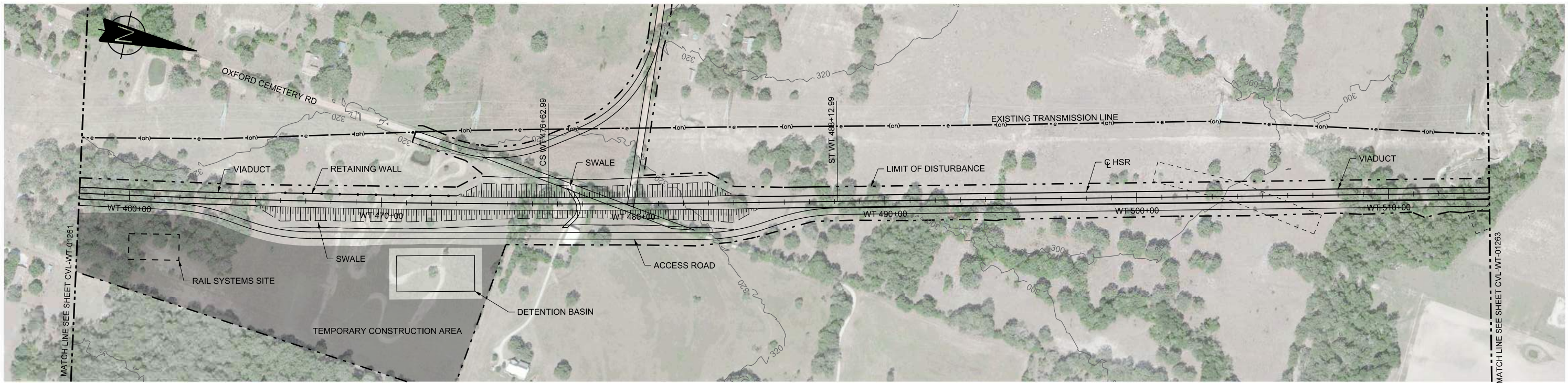
FREESSE AND NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

Client

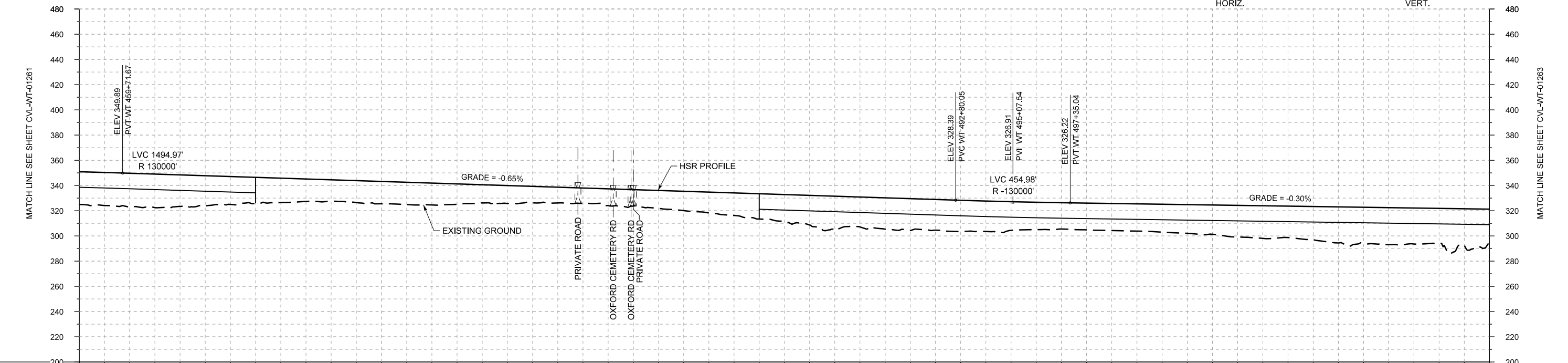
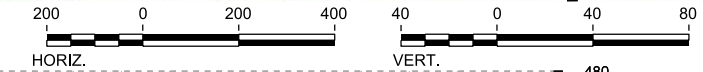
TEXAS CENTRAL
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**WEST OF TEAGUE SEGMENT CIVIL
 PLAN AND PROFILE
 WT 402+00 TO WT 458+00**

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	234180	Drawing No	CVL-WT-01261
Rev			01



PLAN



PROFILE

STATIONING	WT 458+00	WT 460+00	WT 470+00	WT 480+00	WT 490+00	WT 500+00	WT 510+00	WT 514+00
HOR. ALIGNMENT	R=42000 L=3791		L=1150			L=35241		
VER. ALIGNMENT	R=130000		L=3308.38 G=-0.650%			R=130000		L=2205.46 G=-0.300%
CUT AND FILL	+25.9	+26.7	+25.0	+22.1	+19.3	+17.0	+17.7	+14.4
TYP. SECTION	VIADUCT (K)		EMBANKMENT (F)			VIADUCT (K)		

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

ARUP

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Texas Registered Engineering Firm: F-2144

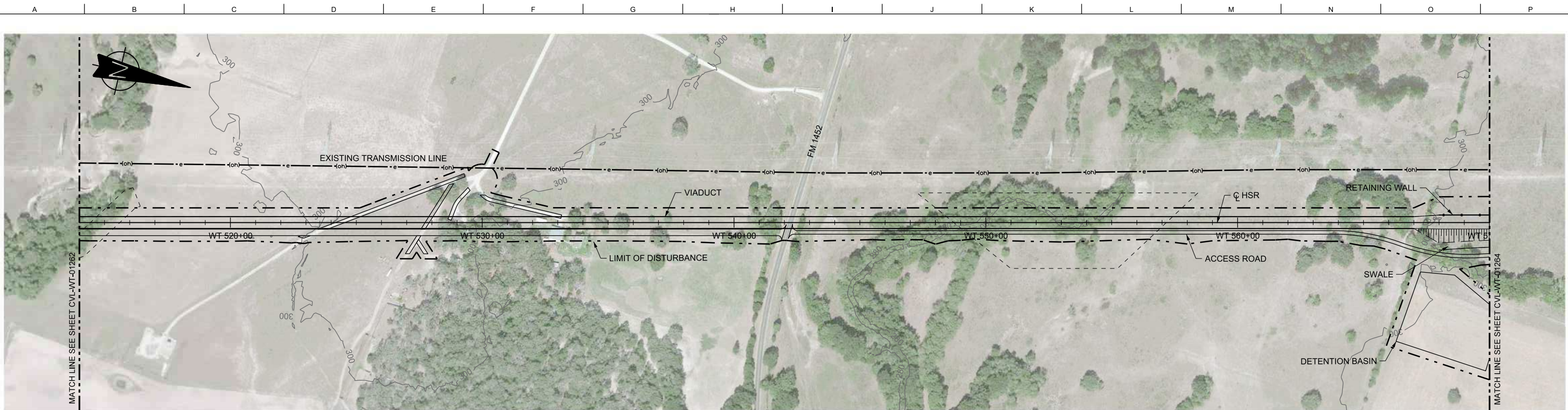
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TEXAS CENTRAL

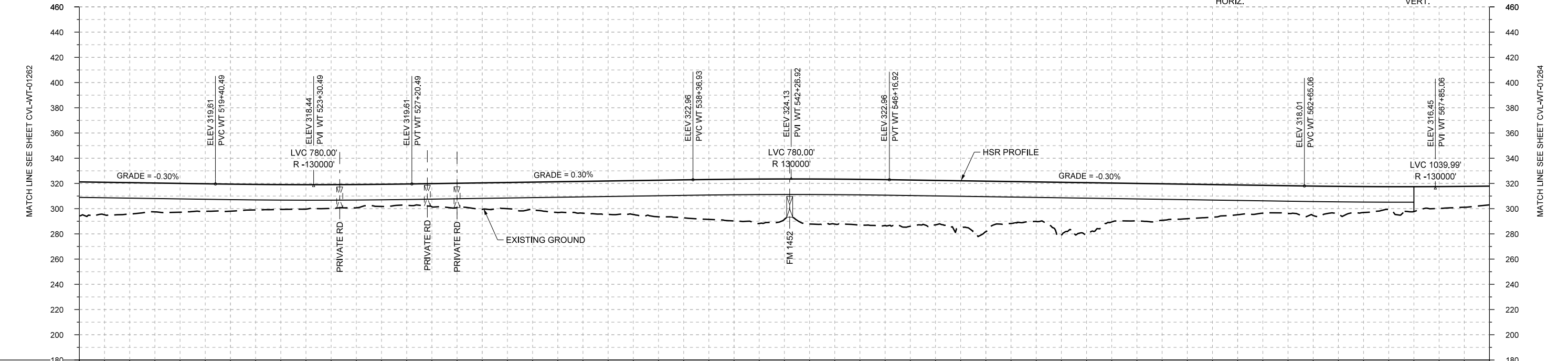
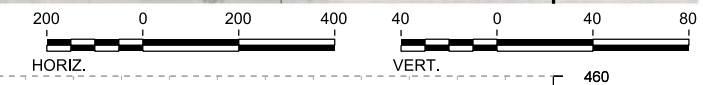
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 458+00 TO WT 514+00

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01262
Rev	01



PLAN



PROFILE

STATIONING	WT 514+00	WT 520+00	WT 530+00	WT 540+00	WT 550+00	WT 560+00	WT 570+00																						
HOR. ALIGNMENT	L=35241																												
VER. ALIGNMENT	L=2205.46 G=-0.300%		R=130000		L=1116.44 G=0.300%		R=130000																						
CUT AND FILL	+27.0	+24.9	+22.8	+21.4	+19.7	+18.7	+17.5	+16.3	+21.0	+22.0	+25.2	+26.9	+30.0	+33.0	+32.0	+35.7	+36.4	+35.3	+40.1	+31.4	+41.4	+29.7	+27.4	+23.6	+22.1	+22.0	+18.1	+17.3	+14.9
TYP. SECTION	VIADUCT (K)															EMBANKMENT (F)													

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

REV	DATE	BY	CHK	APP	DESCRIPTION

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
Houston, Texas 77042 USA
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Texas Registered Engineering Firm: F-1990

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Texas Registered Engineering Firm: F-2144

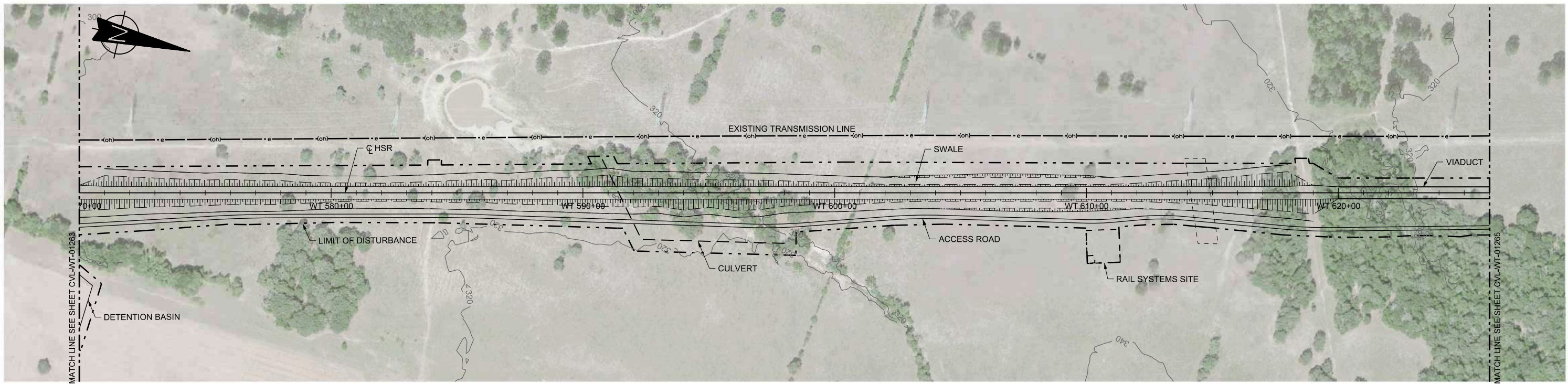
Client
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 514+00 TO WT 570+00

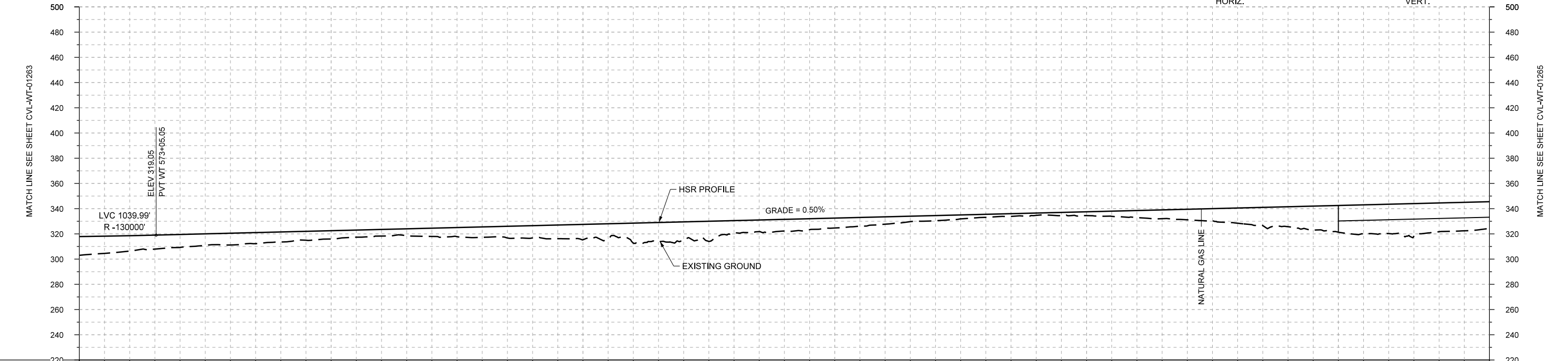
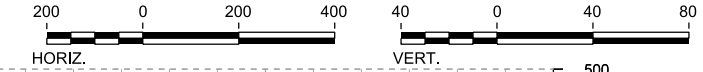
Scale
AS SHOWN

Drawing Status
FINAL DRAFT

Job No	Drawing No	Rev
234180	CVL-WT-01263	01



PLAN



PROFILE

STATIONING	WT 570+00	WT 580+00	WT 590+00	WT 600+00	WT 610+00	WT 620+00	WT 626+00																						
HOR. ALIGNMENT	L=35241																												
VER. ALIGNMENT	L=9849.90 G=0.500%																												
CUT AND FILL	+14.9	+12.2	+10.2	+9.3	+8.0	+6.6	+5.2	+6.5	+8.2	+9.7	+12.2	+15.9	+14.9	+9.4	+9.3	+7.8	+5.8	+4.1	+2.4	+1.8	+3.0	+5.6	+8.3	+12.0	+15.8	+21.2	+23.3	+22.8	+21.3
TYP. SECTION	EMBANKMENT (F)												CUT (H)				EMBANKMENT (F)			VIADUCT (K)									

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

ARUP

Arup Texas, Inc.
10370 Richmond Ave., Suite 475
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2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
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www.freese.com
Texas Registered Engineering Firm: F-2144

Client

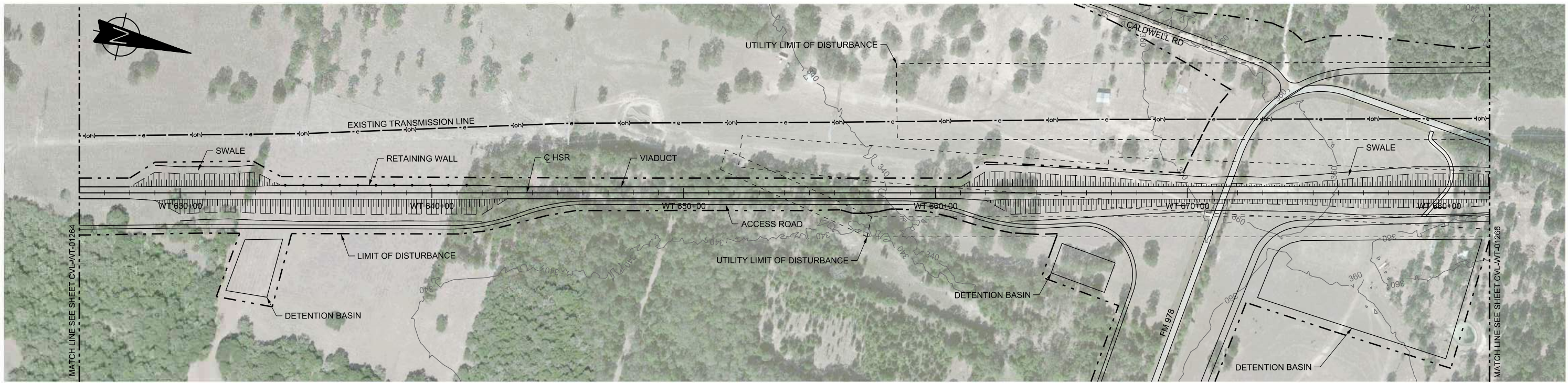
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1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

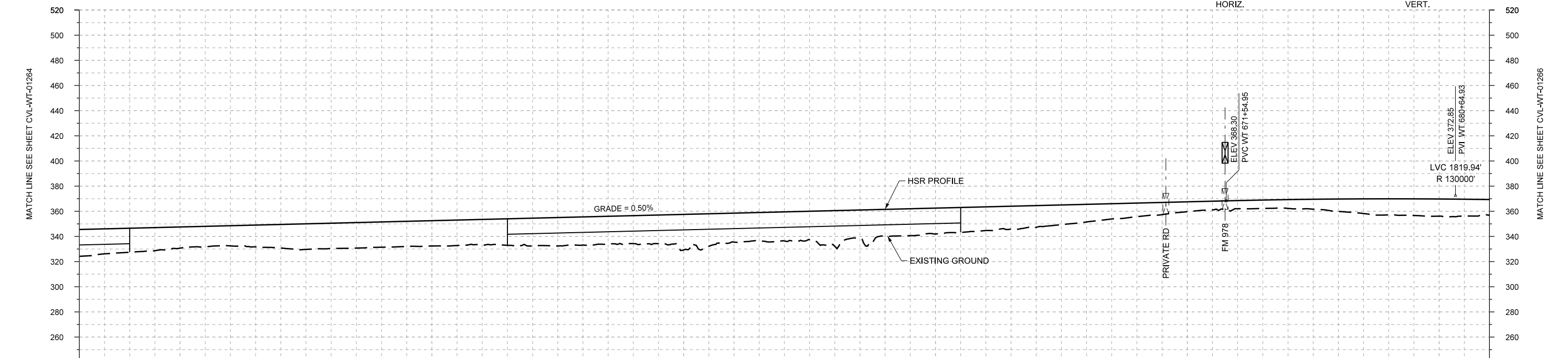
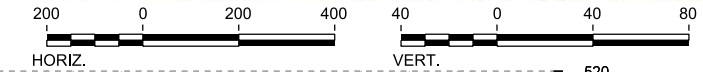
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**WEST OF TEAGUE SEGMENT
CIVIL
PLAN AND PROFILE
WT 570+00 TO WT 626+00**

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	Drawing No	Rev	
234180	CVL-WT-01264	01	



PLAN



PROFILE

STATIONING	WT 626+00	WT 630+00	WT 640+00	WT 650+00	WT 660+00	WT 670+00	WT 680+00	WT 682+00																				
HOR. ALIGNMENT	L=35241																											
VER. ALIGNMENT	L=9849.90 G=0.500%																											
CUT AND FILL	+21.3	+19.1	+18.8	+16.0	+18.7	+20.1	+20.1	+20.2	+22.1	+22.3	+22.2	+23.2	+23.0	+23.1	+23.3	+21.2	+20.5	+18.8	+17.2	+14.0	+10.8	+7.8	+6.4	+7.0	+9.9	+12.8	+13.7	+12.3
TYP. SECTION	VIADUCT (K)		EMBANKMENT (F)										VIADUCT (K)		EMBANKMENT (F)													

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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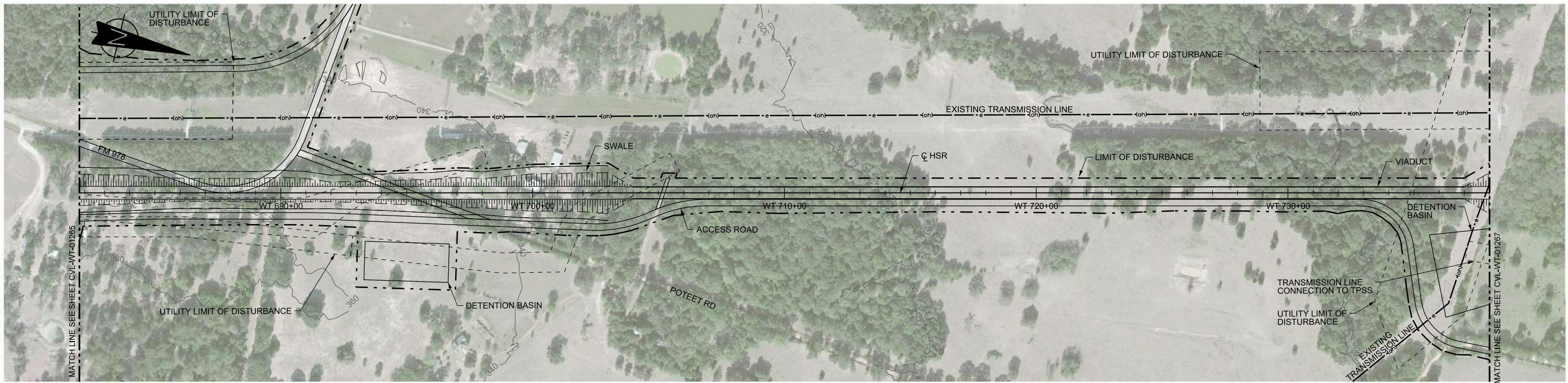
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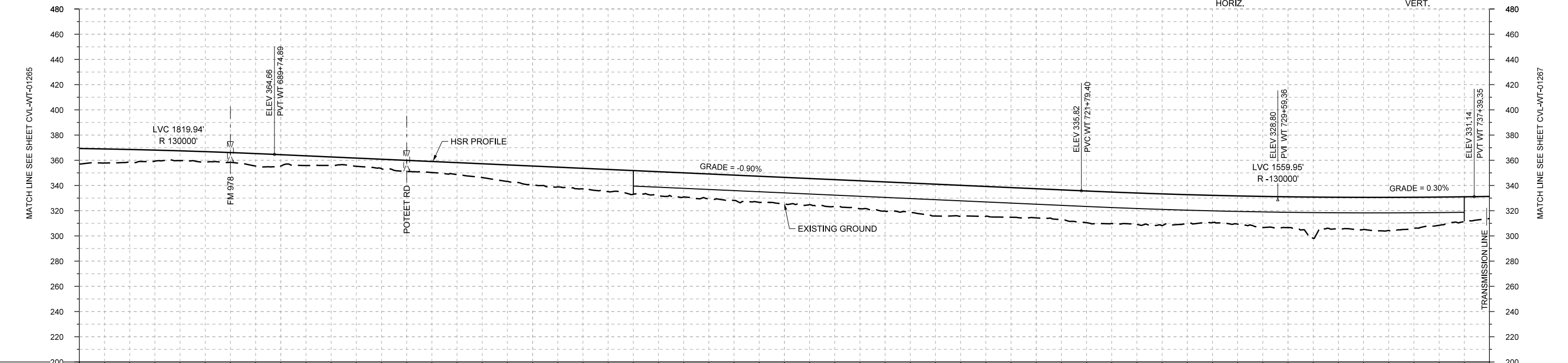
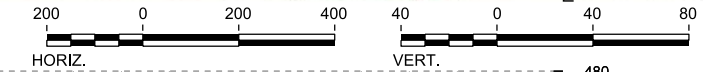
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 626+00 TO WT 682+00**

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	Drawing No	Rev	
234180	CVL-WT-01265	04	



PLAN



PROFILE

STATIONING	WT 682+00	WT 690+00	WT 700+00	WT 710+00	WT 720+00	WT 730+00	WT 738+00
HOR. ALIGNMENT	L=35241						
VER. ALIGNMENT	R=130000		L=3204.50 G=-0.900%				R=-130000
CUT AND FILL	+12.3	+9.8	+7.8	+7.7	+9.0	+6.7	+7.5
TYP. SECTION	EMBANKMENT (F)				VIADUCT (K)		

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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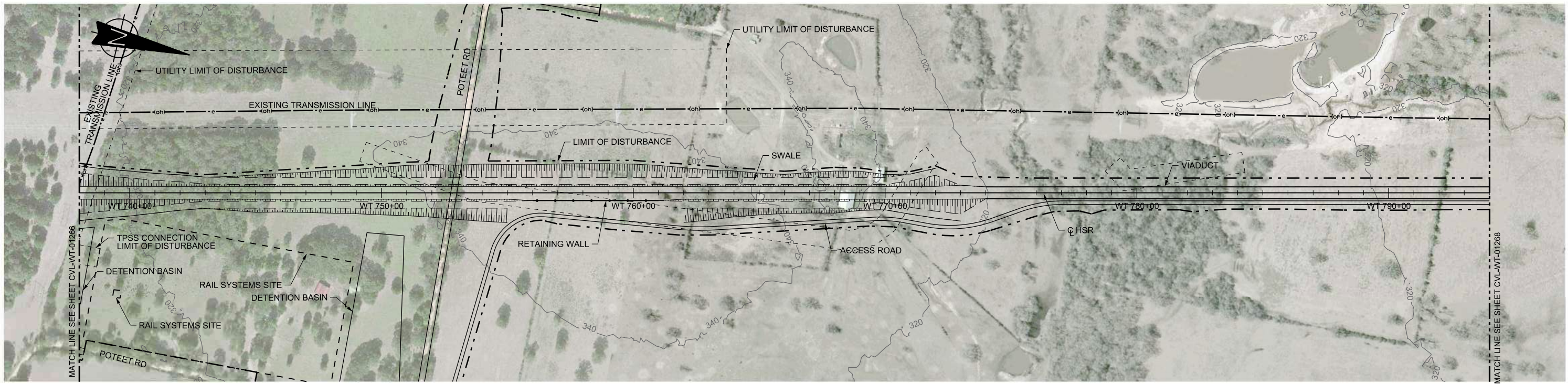
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TEXAS CENTRAL

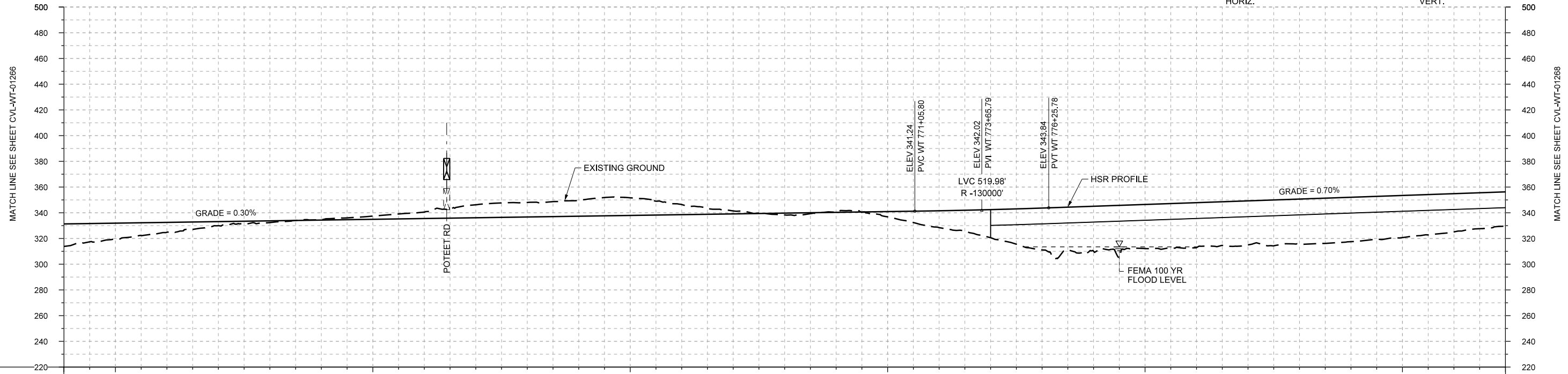
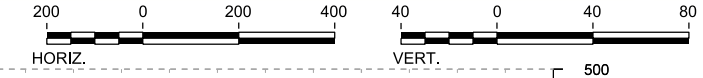
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 682+00 TO WT 738+00

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	Drawing No	Rev	
234180	CVL-WT-01266	01	



PLAN



STATIONING	WT 738+00	WT 740+00	WT 750+00	WT 760+00	WT 770+00	WT 780+00	WT 790+00	WT 794+00																					
HOR. ALIGNMENT	L=35241																												
VER. ALIGNMENT	L=3366.45 G=0.300%				R=-130000		L=3834.81 G=0.700%																						
CUT AND FILL	+17.5	+12.7	+7.6	+3.2	+1.3	-0.4	-2.5	-5.1	-10.1	-11.3	-12.4	-13.8	-7.9	-2.3	+1.4	-0.2	+4.1	+13.1	+21.9	+32.6	+35.0	+34.3	+35.0	+34.3	+35.0	+34.6	+32.8	+29.8	+26.7
TYP. SECTION	EMBANKMENT (F)			CUT (H)										EMBANKMENT (F)		VIADUCT (K)													

PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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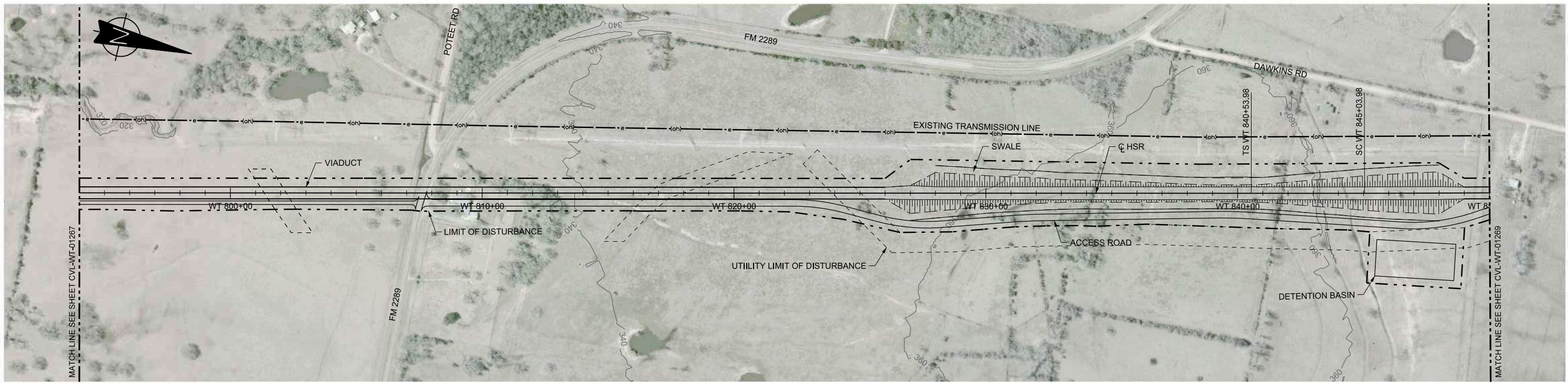
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TEXAS CENTRAL

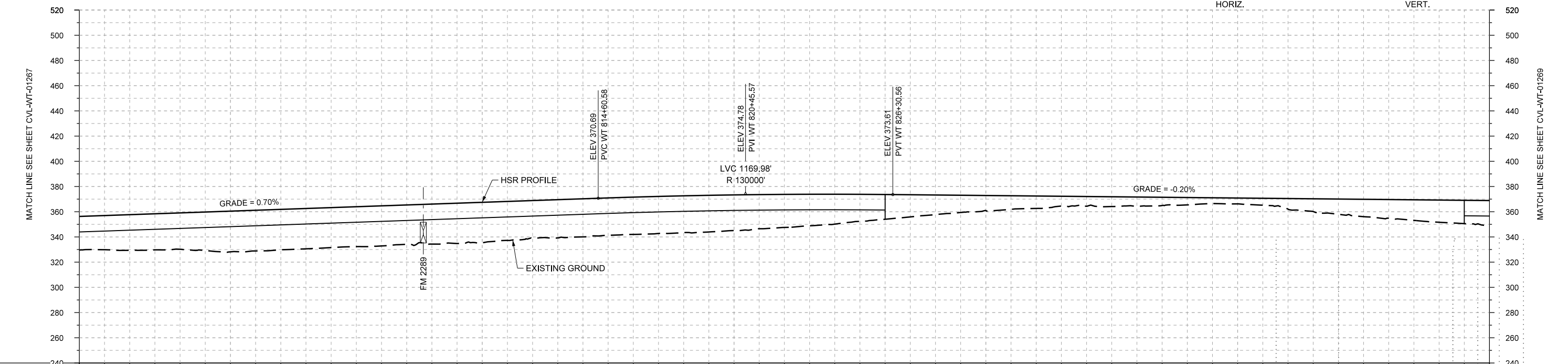
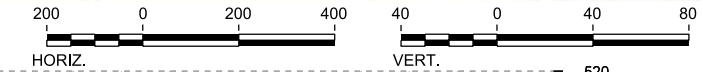
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 738+00 TO WT 794+00**

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	Drawing No	Rev	
234180	CVL-WT-01267	01	



PLAN



PROFILE

STATIONING	WT 794+00	WT 800+00	WT 810+00	WT 820+00	WT 830+00	WT 840+00	WT 850+00
HOR. ALIGNMENT	L=35241						R=115000 L=2144
VER. ALIGNMENT	L=3834.81 G=0.700%			R=130000		L=2877.53 G=-0.200%	
CUT AND FILL	+26.7	+26.3	+28.9	+32.3	+32.0	+31.7	+31.8
TYP. SECTION	VIADUCT (K)			EMBANKMENT (F)			EMBANKMENT (F)

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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Texas Registered Engineering Firm: F-2144

Client

TEXAS CENTRAL

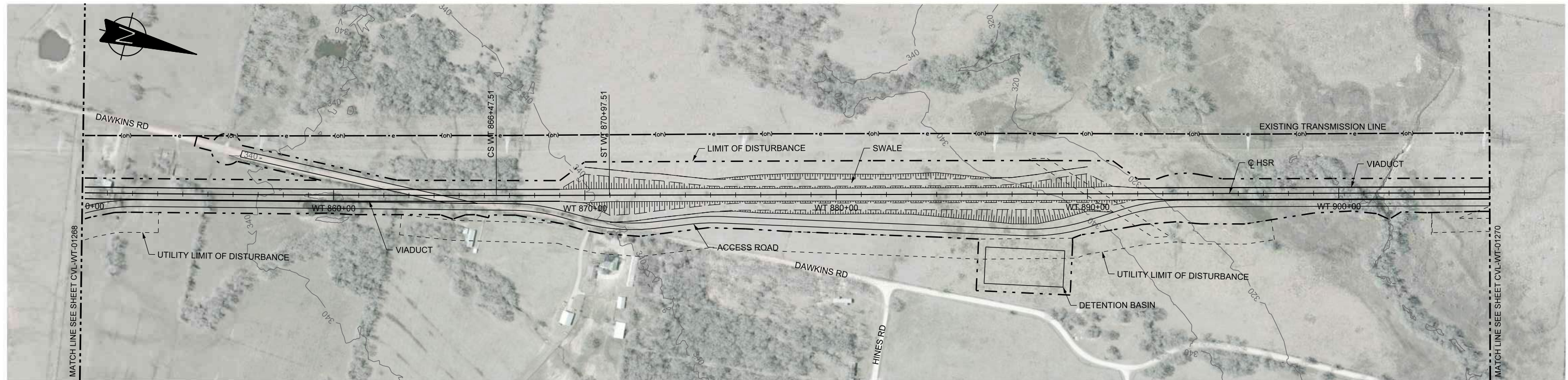
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 794+00 TO WT 850+00**

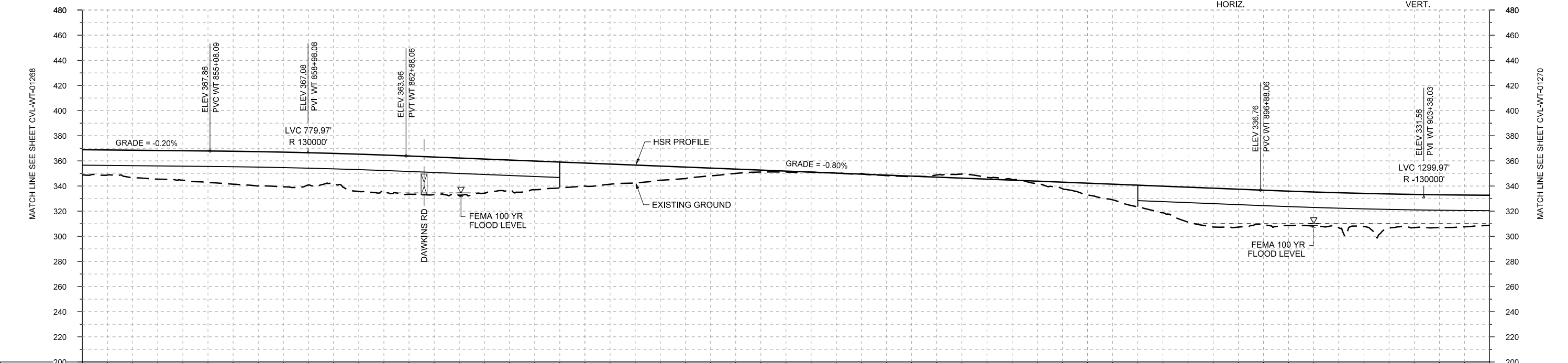
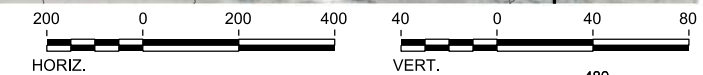
Scale
AS SHOWN

Drawing Status
FINAL DRAFT

Job No 234180	Drawing No CVL-WT-01268	Rev 01
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PLAN



STATIONING	WT 850+00	WT 860+00	WT 870+00	WT 880+00	WT 890+00	WT 900+00	WT 906+00
HOR. ALIGNMENT	R=-115000 L=2144		L=450	L=3400.00 G=-0.800%			L=6265
VER. ALIGNMENT	L=2877.53 G=-0.200%		R=130000	L=3400.00 G=-0.800%			R=-130000
CUT AND FILL	+20.0	+21.8	+23.5	+26.1	+27.6	+23.4	+28.0
TYP. SECTION	VIADUCT (K)			EMBANKMENT (F)		CUT (H)	

PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017



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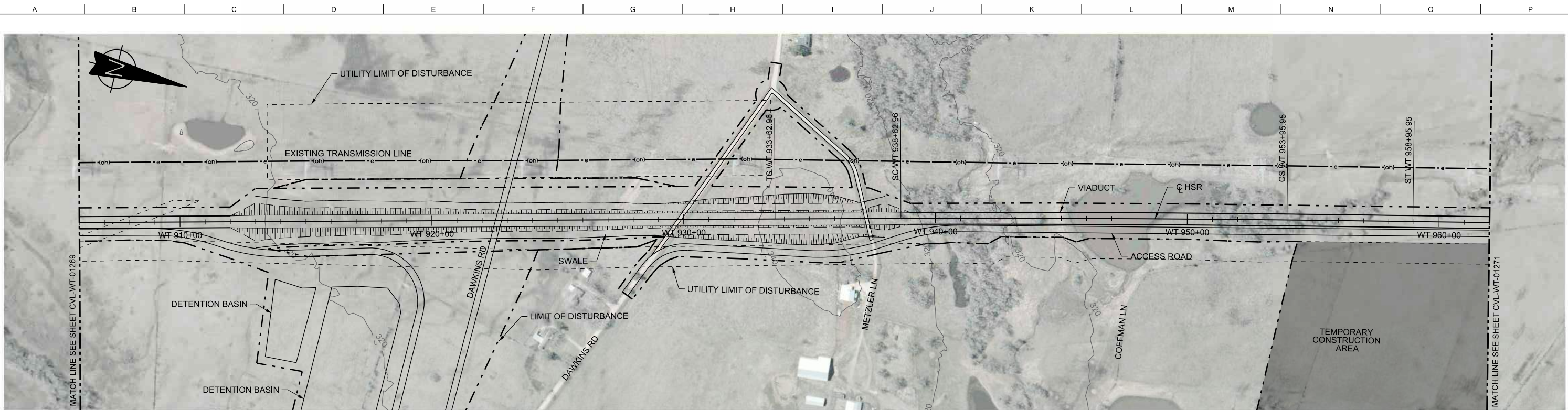
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
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Texas Registered Engineering Firm: F-2144



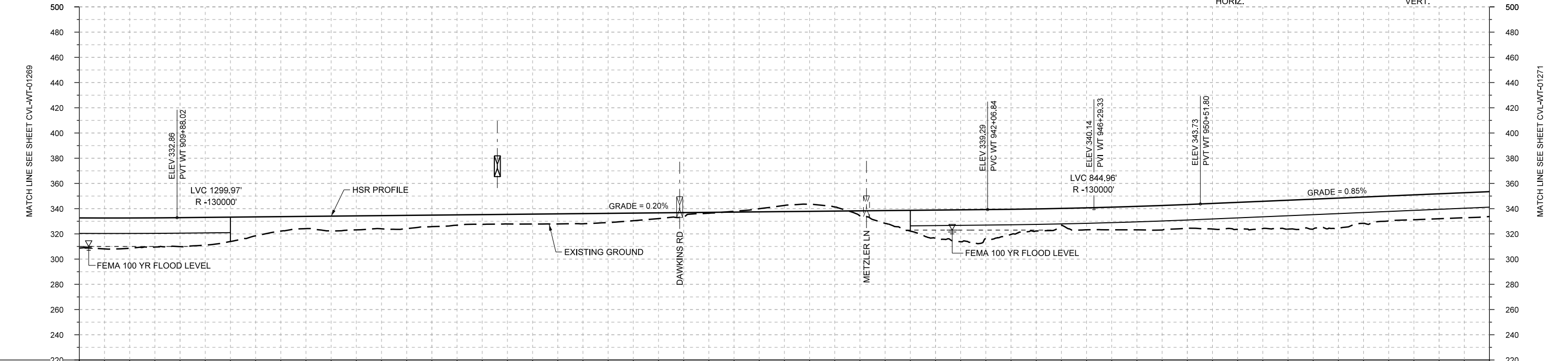
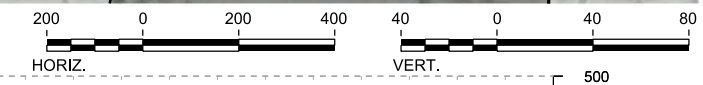
Client
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 850+00 TO WT 906+00**

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01269
Rev	01



PLAN



PROFILE

STATIONING	WT 906+00	WT 910+00	WT 920+00	WT 930+00	WT 940+00	WT 950+00	WT 960+00	WT 962+00																				
HOR. ALIGNMENT	L=8265			L=500		R=110000 L=1533		L=5612																				
VER. ALIGNMENT	R=-130000		L=3218.82 G=0.200%		R=-130000		L=3742.33 G=0.850%																					
CUT AND FILL	+23.9	+24.0	+23.0	+19.3	+11.5	+11.7	+10.5	+9.1	+7.7	+7.9	+8.1	+6.1	+3.9	-0.6	-4.9	-3.2	+10.1	+22.5	+23.1	+17.5	+18.6	+18.9	+21.4	+22.9	+24.0	+19.8	+19.8	+19.7
TYP. SECTION	VIADUCT (K)			EMBANKMENT (F)					CUT (H)			VIADUCT (K)																

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

REV	DATE	BY	CHK	APP	DESCRIPTION

ARUP

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Client

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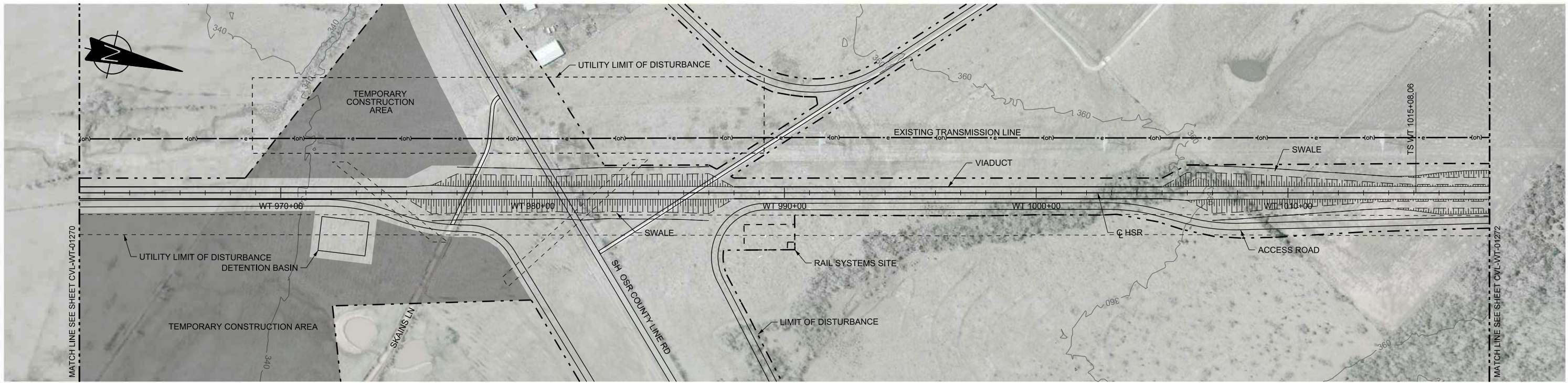
Drawing Title

**WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 906+00 TO WT 962+00**

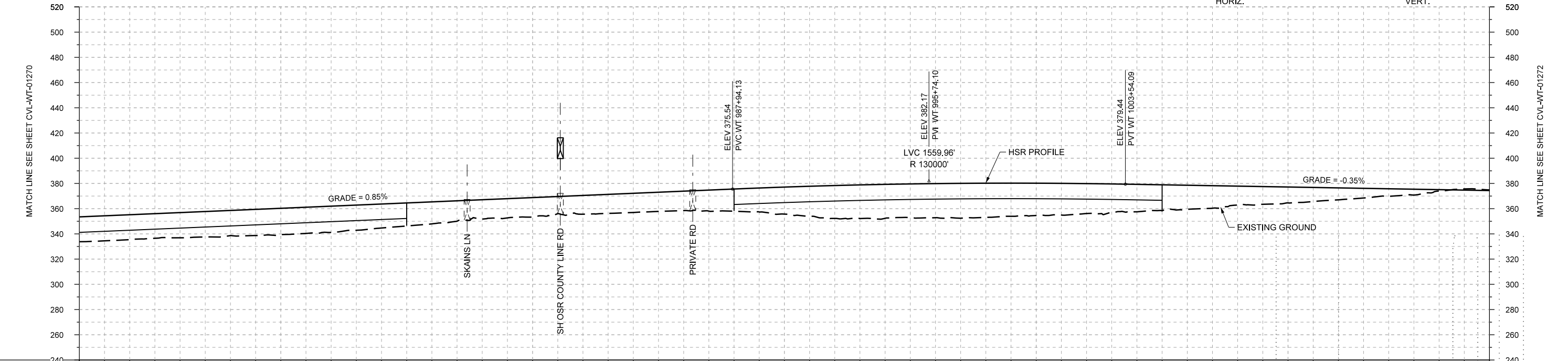
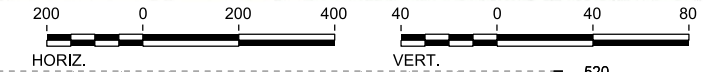
Scale
AS SHOWN

Drawing Status
FINAL DRAFT

Job No	Drawing No	Rev
234180	CVL-WT-01270	01



PLAN



PROFILE

STATIONING	WT 962+00	WT 970+00	WT 980+00	WT 990+00	WT 1000+00	WT 1010+00	WT 1018+00
HOR. ALIGNMENT	L=5612				L=700		
VER. ALIGNMENT	L=3742.33 G=0.850%				R=130000		L=2490.69 G=-0.350%
CUT AND FILL	+19.7	+19.7	+20.0	+19.9	+20.8	+20.8	+19.0
TYP. SECTION	VIADUCT (K)		EMBANKMENT (F)		VIADUCT (K)		EMBANKMENT (F) CUT (H)

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
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C. TAYLOR

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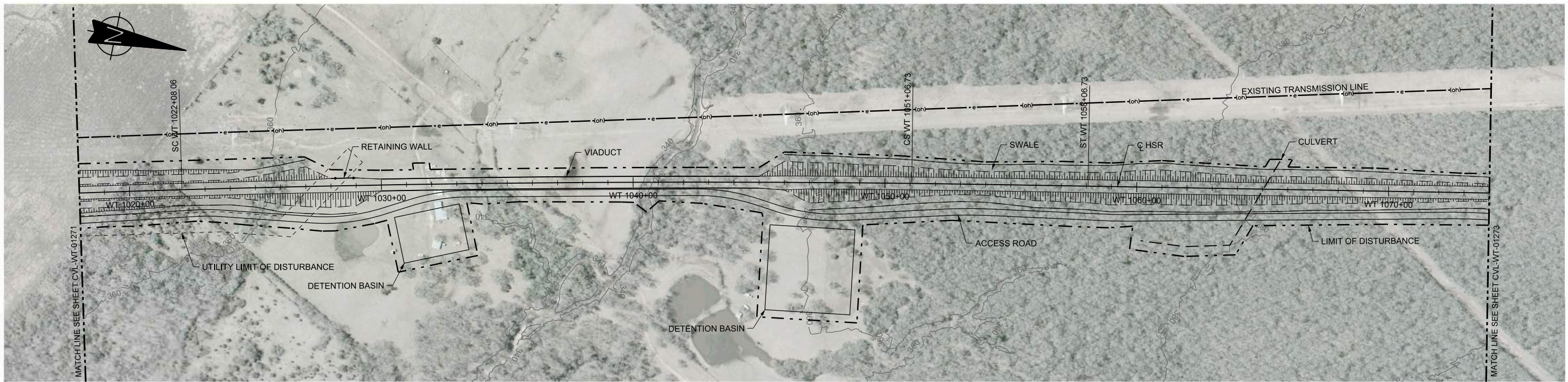
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TEXAS CENTRAL

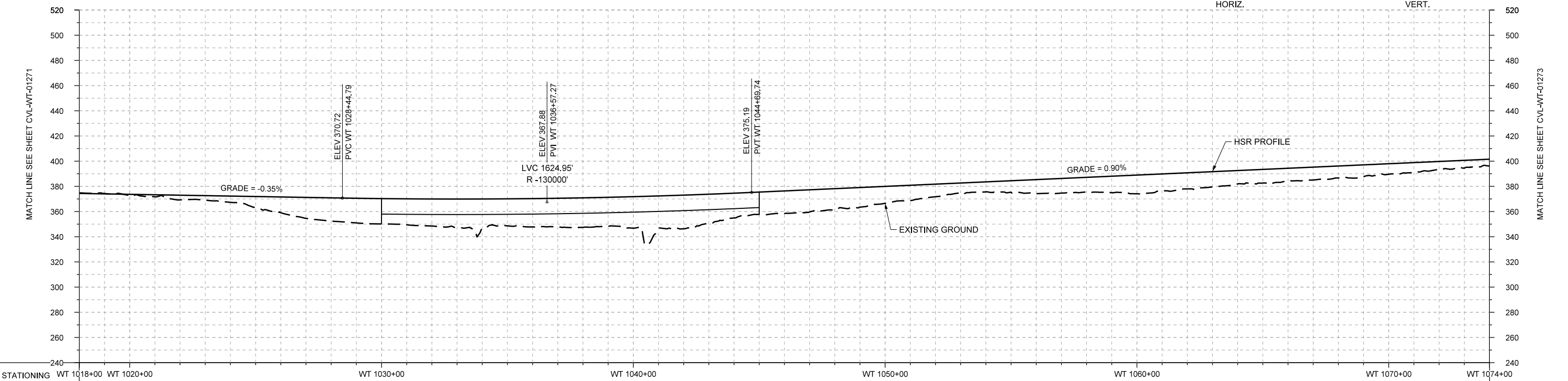
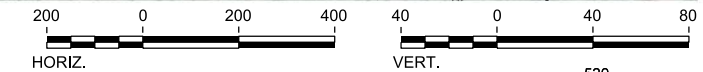
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 962+00 TO WT 1018+00

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01271
Rev	01



PLAN



PROFILE

STATIONING	WT 1018+00	WT 1020+00	WT 1030+00	WT 1040+00	WT 1050+00	WT 1060+00	WT 1070+00	WT 1074+00																					
HOR. ALIGNMENT	L=700		R=70000 L=2899			L=700		L=19823																					
VER. ALIGNMENT	L=2490.69 G=-0.350%		R=-130000			L=5800.68 G=0.900%																							
CUT AND FILL	-0.5	+0.7	+3.8	+5.0	+12.5	+18.5	+20.1	+21.5	+23.2	+22.5	+23.4	+25.0	+26.7	+19.7	+18.0	+16.9	+13.5	+10.0	+8.0	+11.2	+11.6	+14.9	+12.8	+10.6	+10.4	+9.5	+8.4	+6.6	+5.3
TYP. SECTION	CUT (H)		EMBANKMENT (F)			VIADUCT (K)			EMBANKMENT (F)																				

REV	DATE	BY	CHK	APP	DESCRIPTION

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

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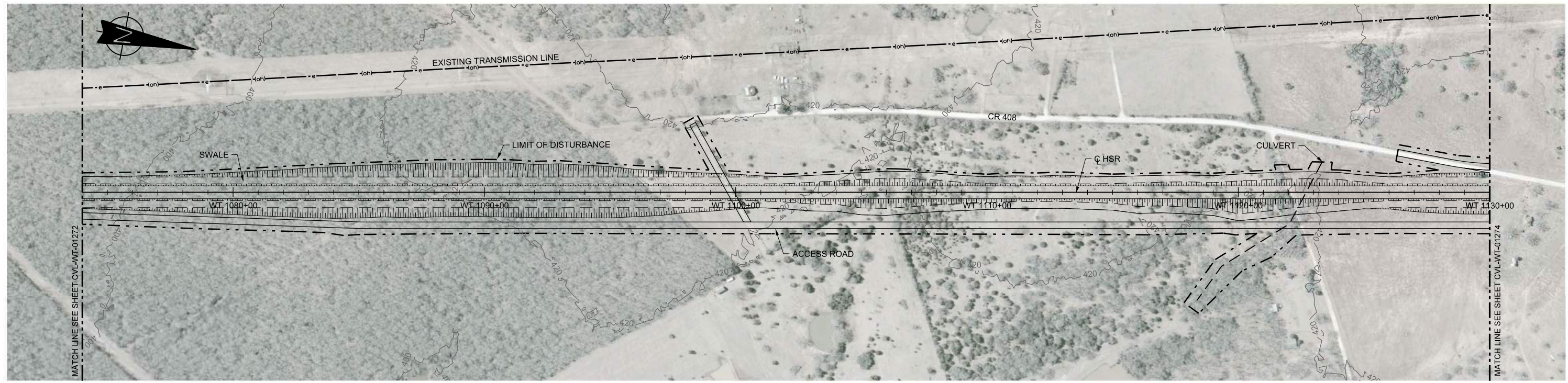
FREESSE AND NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freesse.com
 Texas Registered Engineering Firm: F-2144

Client

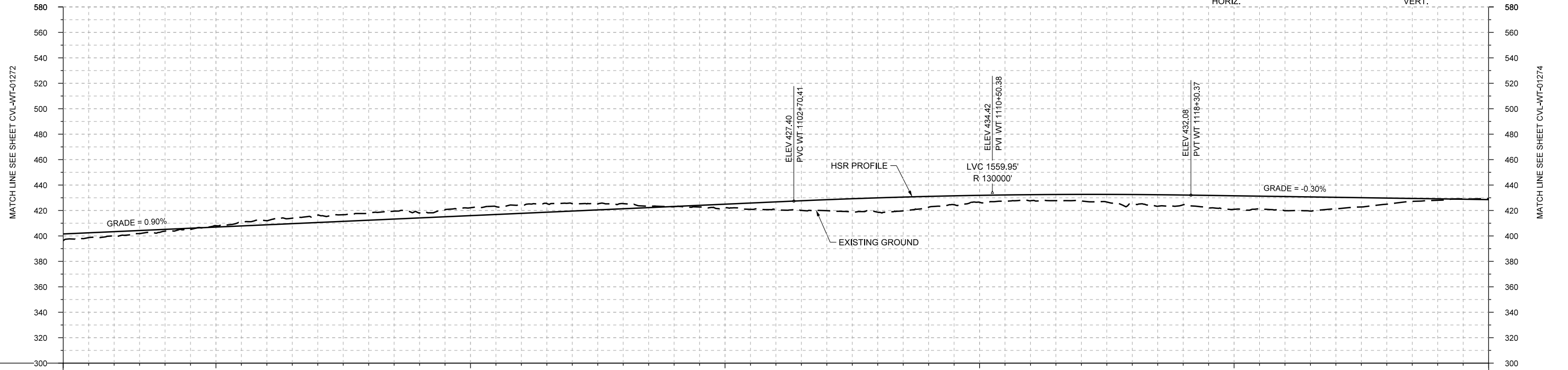
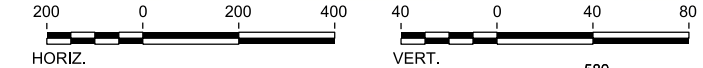
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 1018+00 TO WT 1074+00

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01272
Rev	01



PLAN



STATIONING	WT 1074+00	WT 1080+00	WT 1090+00	WT 1100+00	WT 1110+00	WT 1120+00	WT 1130+00																						
HOR. ALIGNMENT	L=19823																												
VER. ALIGNMENT	L=5800.68 G=0.900%			R=130000			L=3999.42 G=-0.300%																						
CUT AND FILL	+5.3	+3.4	+1.4	-1.1	-3.2	-5.8	-5.4	-3.8	-6.2	-6.5	-5.7	-4.0	+0.3	+2.8	+6.1	+8.7	+11.2	+8.5	+5.4	+4.8	+5.2	+7.6	+7.7	+10.7	+11.2	+9.0	+4.9	+1.2	-0.8
TYP. SECTION	CUT (C)										EMBANKMENT (A)										CUT (C)								

PROFILE

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

REV	DATE	BY	CHK	APP	DESCRIPTION

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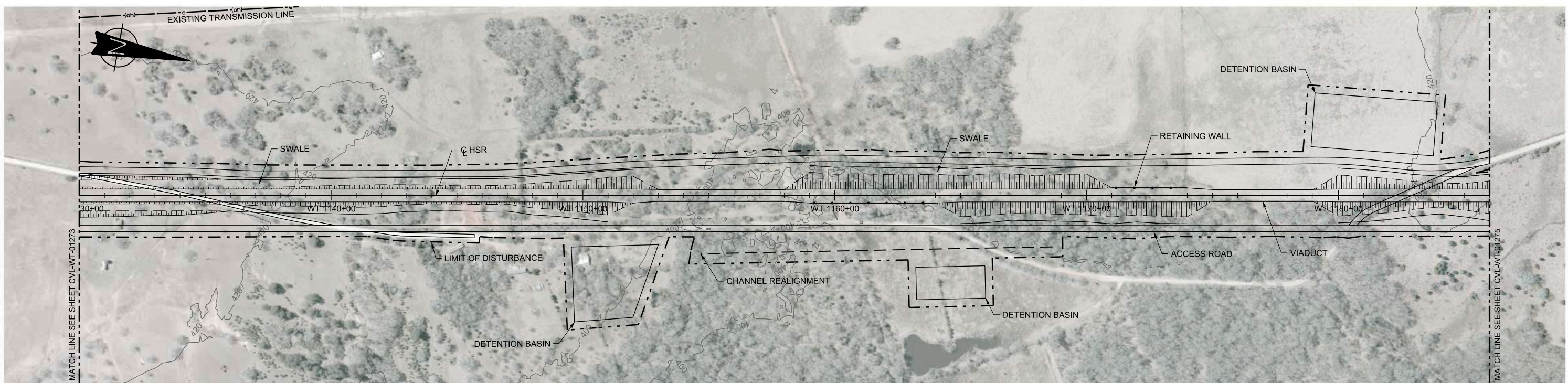
Drawing Title

WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 1074+00 TO WT 1130+00

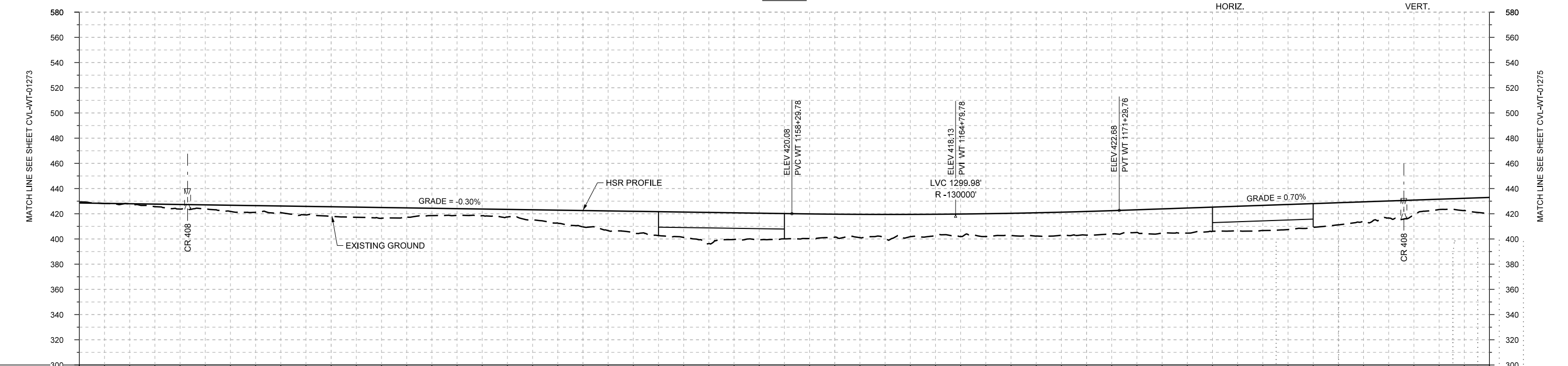
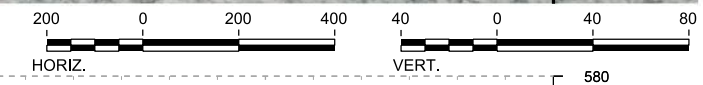
Scale
AS SHOWN

Drawing Status
FINAL DRAFT

Job No	234180	Drawing No	CVL-WT-01273	Rev	01
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PLAN



PROFILE

STATIONING	WT 1130+00	WT 1140+00	WT 1150+00	WT 1160+00	WT 1170+00	WT 1180+00	WT 1186+00
HOR. ALIGNMENT							
VER. ALIGNMENT	L=3999.42 G=-0.300%						
CUT AND FILL	-0.8	+0.2	+3.7	+4.9	+5.3	+7.6	+8.6
TYP. SECTION	CUT (C)		EMBANKMENT (A)			VIADUCT (E)	EMBANKMENT (A)

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

ARUP
 Arup Texas, Inc.
 10370 Richmond Ave., Suite 475
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 Tel (713) 783 2787 Fax (713) 343 1467
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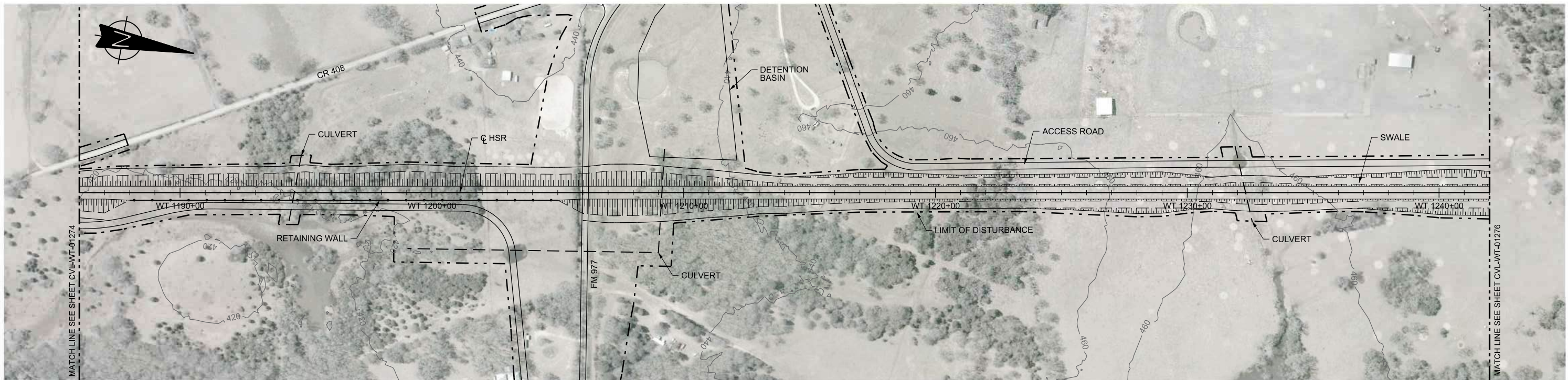
FREESSE AND NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

Client

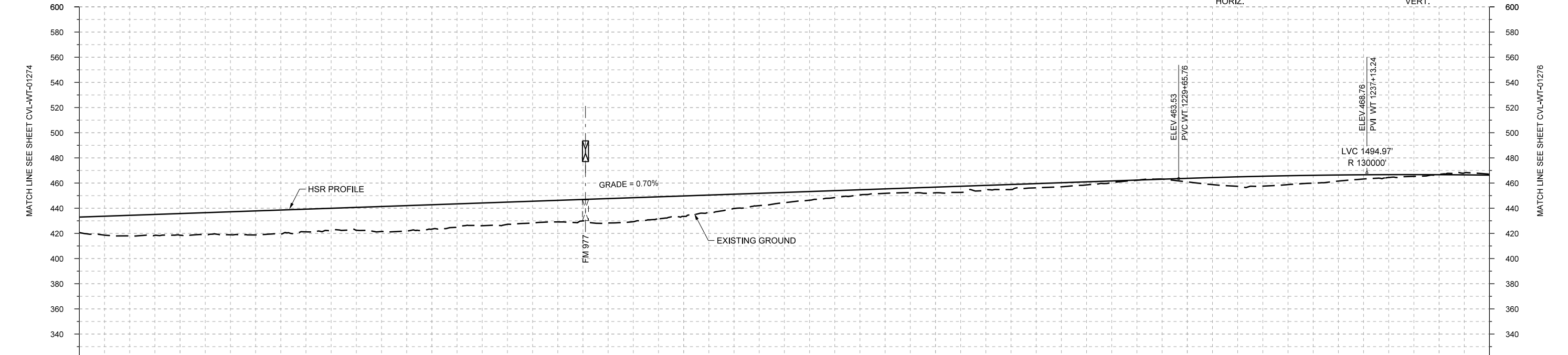
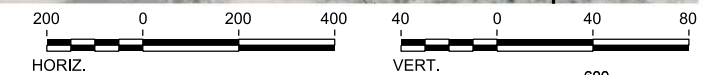
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 1130+00 TO WT 1186+00

Scale
 AS SHOWN
 Drawing Status
FINAL DRAFT
 Job No 234180 Drawing No CVL-WT-01274 Rev 01



PLAN



PROFILE

STATIONING	WT 1186+00	WT 1190+00	WT 1200+00	WT 1210+00	WT 1220+00	WT 1230+00	WT 1240+00	WT 1242+00																					
HOR. ALIGNMENT	L=19823																												
VER. ALIGNMENT	L=5836.00 G=0.700%																												
CUT AND FILL	+12.3	+16.4	+17.2	+18.3	+19.1	+17.6	+19.9	+19.4	+18.1	+17.4	+17.1	+19.1	+18.3	+11.5	+8.2	+5.5	+3.6	+4.5	+4.0	+3.4	+2.5	+0.2	+2.9	+7.5	+7.0	+4.8	+2.3	-0.2	-0.8
TYP. SECTION	EMBANKMENT (A)												CUT (C)			EMBANKMENT (A)				CUT (C)									

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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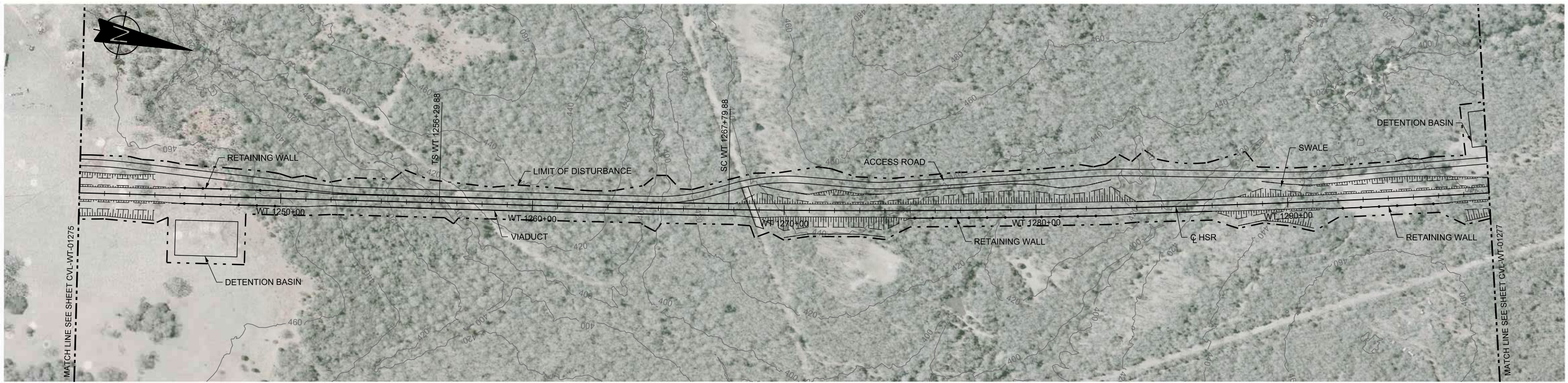
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TEXAS CENTRAL

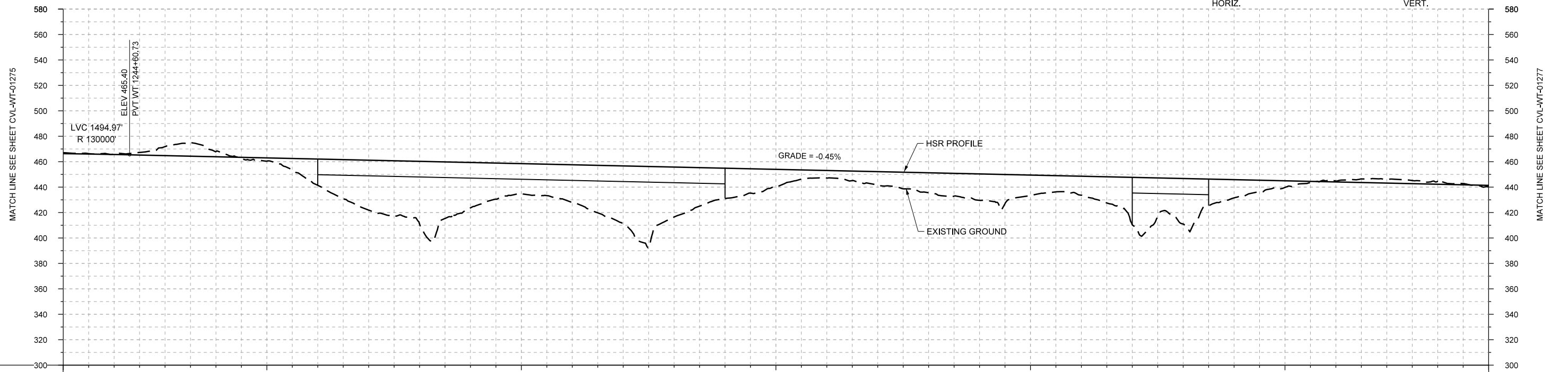
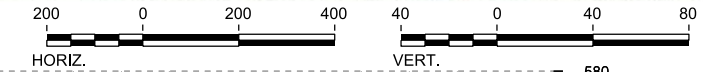
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 1186+00 TO WT 1242+00

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	Drawing No	Rev	
234180	CVL-WT-01275	01	



PLAN



PROFILE

STATIONING	WT 1242+00	WT 1250+00	WT 1260+00	WT 1270+00	WT 1280+00	WT 1290+00	WT 1298+00																						
HOR. ALIGNMENT	L=19823		L=1150		L=6400.07 G=-0.450%																								
VER. ALIGNMENT	R=130000				R=42000 L=5470																								
CUT AND FILL	-0.8	-0.3	-7.1	-4.0	+2.6	+20.7	+39.3	+49.4	+35.7	+23.8	+29.3	+45.5	+39.3	+24.1	+13.0	+6.0	+10.9	+15.7	+20.8	+16.1	+15.0	+37.3	+35.8	+14.4	+5.2	-0.7	-2.9	-2.3	+1.2
TYP. SECTION	CUT (C)		RETAINED CUT (D)		RETAINED FILL (B)		VIADUCT (E)					EMBANKMENT (A)					VIADUCT (E)		EMBANKMENT (A)		CUT (C)								

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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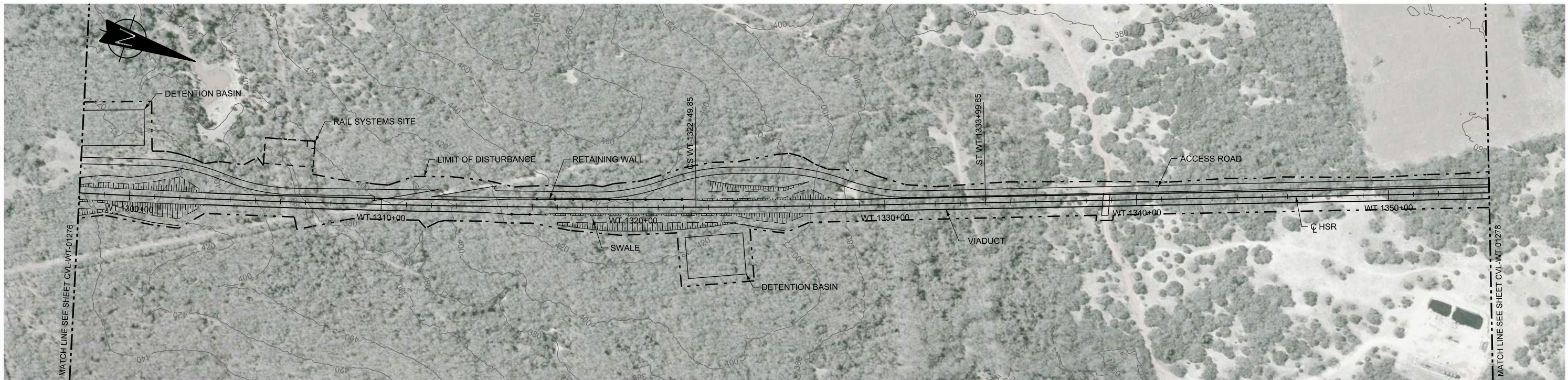
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TEXAS CENTRAL

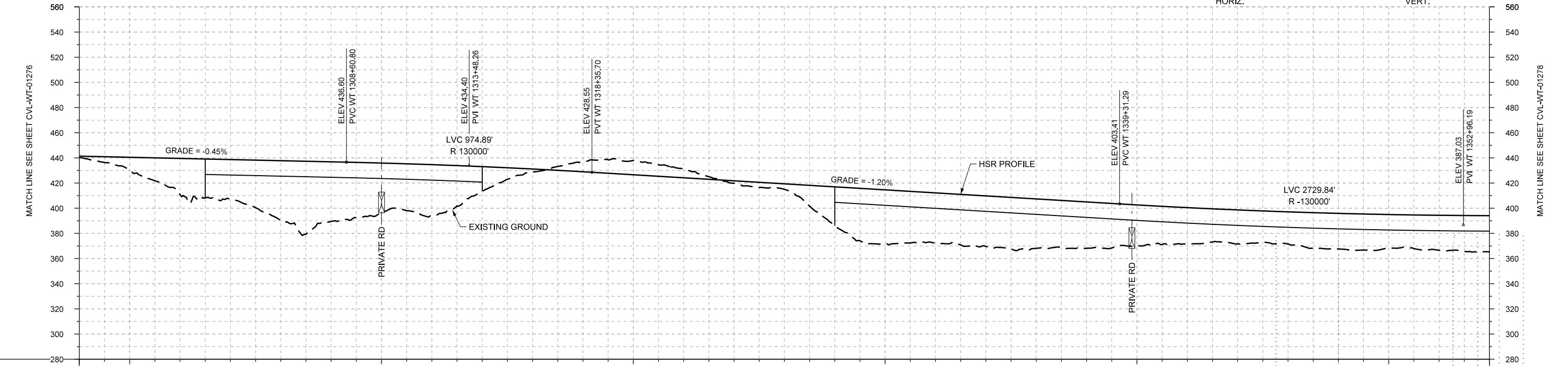
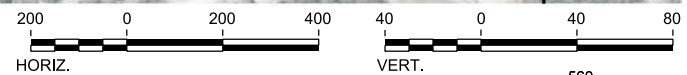
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 1242+00 TO WT 1298+00**

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	234180	Drawing No	CVL-WT-01276
Rev			01



PLAN



PROFILE

STATIONING	WT 1298+00	WT 1300+00	WT 1310+00	WT 1320+00	WT 1330+00	WT 1340+00	WT 1350+00	WT 1354+00
HOR. ALIGNMENT								
VER. ALIGNMENT	L=6400.07 G=-0.450%		R=42000 L=5470		R=130000		L=1150 L=2095.60 G=-1.200%	
CUT AND FILL	+1.2	+10.4	+28.8	+31.5	+47.5	+47.5	+39.5	+40.5
TYP. SECTION	(C)	EMBANKMENT (A)		VIADUCT (E)		(B)	(D)	CUT (C)

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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Client

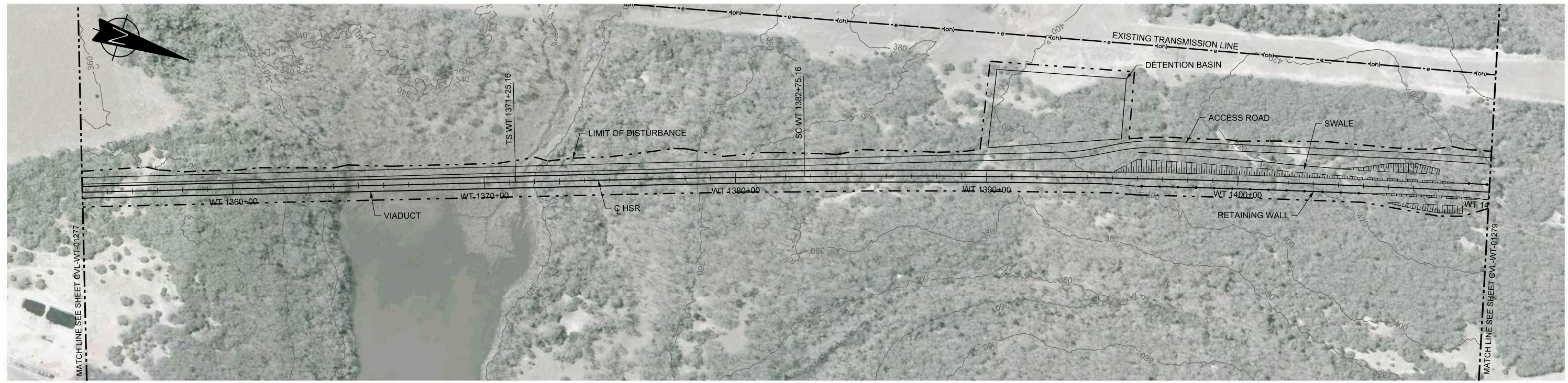
TEXAS CENTRAL

1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

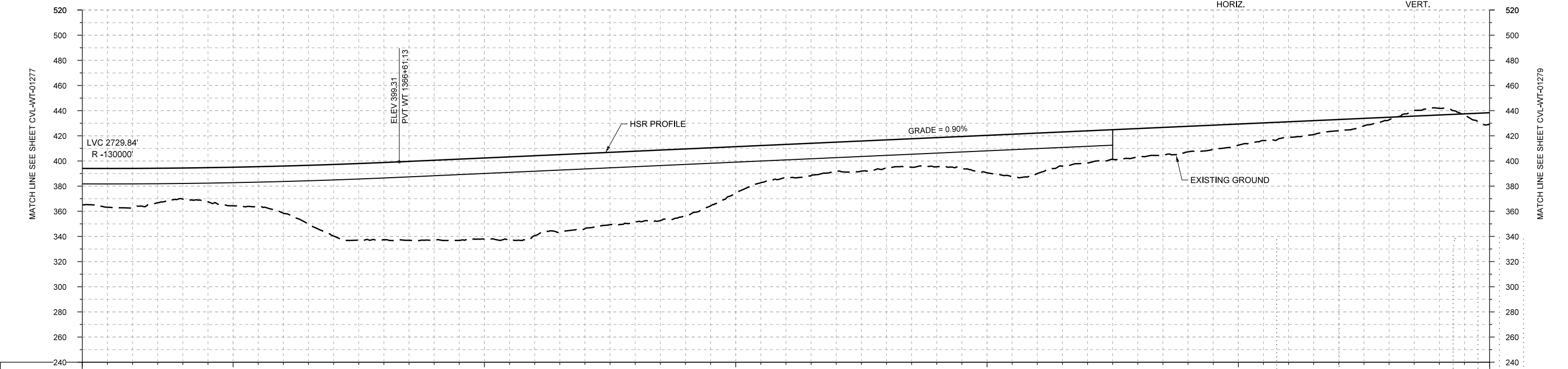
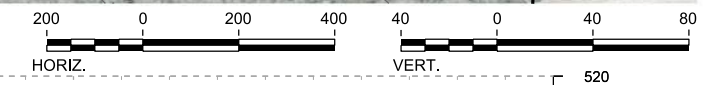
Drawing Title

WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 1298+00 TO WT 1354+00

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01277
Rev	01



PLAN



STATIONING	WT 1354+00	WT 1360+00	WT 1370+00	WT 1380+00	WT 1390+00	WT 1400+00	WT 1410+00	
HOR. ALIGNMENT	L=3725			L=1150		R=42000 L=6599		
VER. ALIGNMENT	R=130000			L=9754.09 G=0.900%				
CUT AND FILL	+25.9	+31.6	+24.7	+30.7	+37.6	+56.9	+61.4	
				+63.6	+64.6	+63.6	+59.9	
				+56.3	+53.1	+36.8	+26.7	
				+23.4	+22.1	+23.2	+29.8	
				+32.2	+25.7	+22.9	+20.3	
				+16.9	+12.6	+9.0	+2.1	
							-5.2	
							-9.5	
TYP. SECTION	VIADUCT (E)				EMBANKMENT (F)		(G)	CUT (H)

PROFILE

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

REV	DATE	BY	CHK	APP	DESCRIPTION

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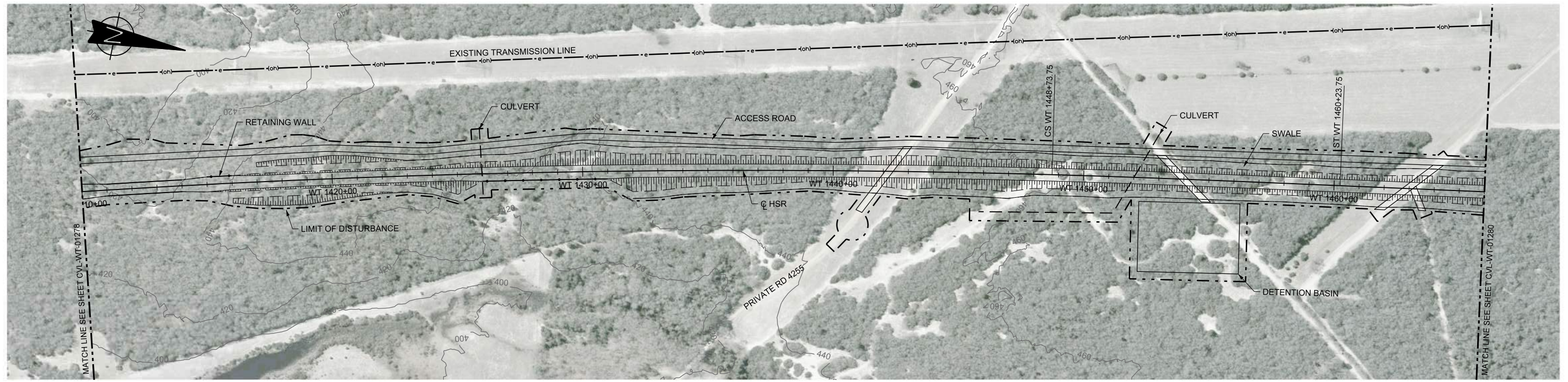
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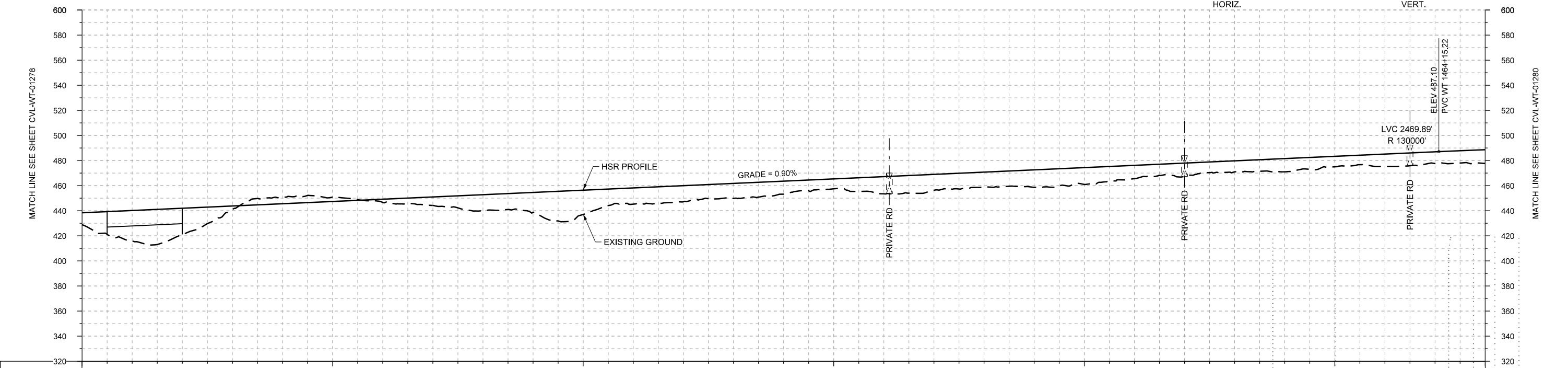
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 1354+00 TO WT 1410+00

Scale
 AS SHOWN
 Drawing Status
FINAL DRAFT
 Job No 234180 Drawing No CVL-WT-01278 Rev 01



PLAN



STATIONING	WT 1410+00	WT 1420+00	WT 1430+00	WT 1440+00	WT 1450+00	WT 1460+00	WT 1466+00																						
HOR. ALIGNMENT			R=42000 L=6599		L=9754.09 G=0.900%	L=1150	L=3192																						
VER. ALIGNMENT							R=130000																						
CUT AND FILL	+9.5	+24.3	+21.0	+2.9	-4.8	-3.3	+2.5	+6.8	+12.7	+15.8	+19.4	+13.0	+12.8	+12.0	+10.4	+7.9	+13.7	+12.7	+11.9	+14.0	+13.5	+10.6	+10.6	+8.8	+10.6	+8.4	+9.9	+9.4	+10.8
TYP. SECTION	(G)	VIADUCT (K)	(G)		CUT (H)																								

PROFILE

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

REV	DATE	BY	CHK	APP	DESCRIPTION

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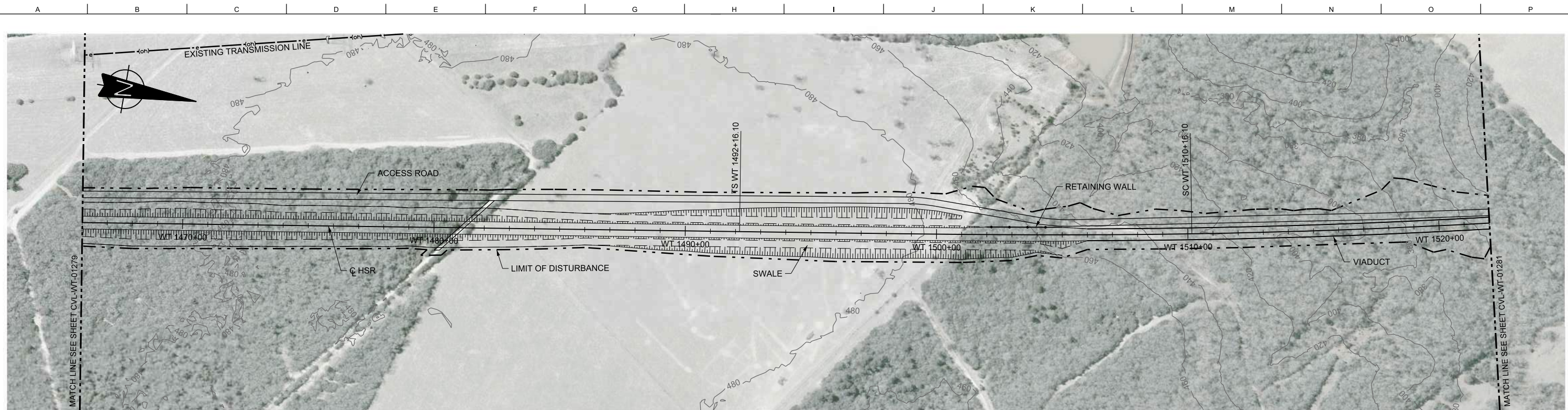
FRESE AND NICHOLS
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Client

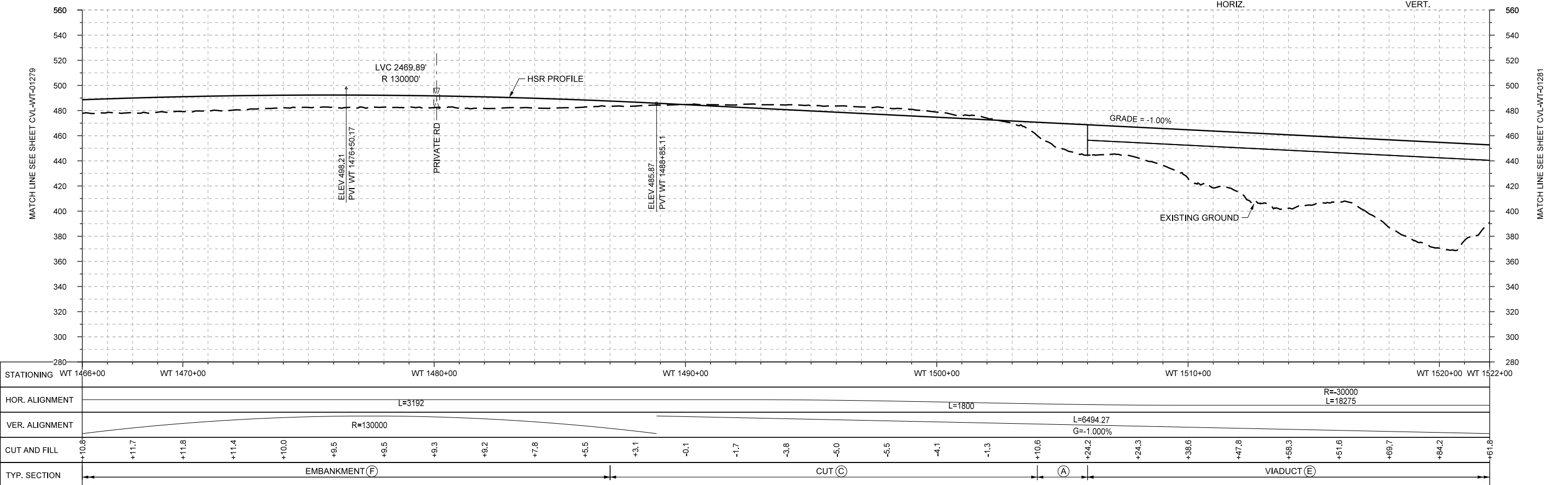
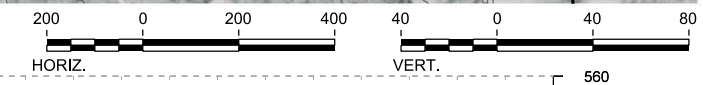
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE
 WT 1410+00 TO WT 1466+00

Scale
 AS SHOWN
 Drawing Status
FINAL DRAFT
 Job No 234180 Drawing No CVL-WT-01279 Rev 01



PLAN



PROFILE

STATIONING	WT 1466+00	WT 1470+00	WT 1480+00	WT 1490+00	WT 1500+00	WT 1510+00	WT 1520+00	WT 1522+00																					
HOR. ALIGNMENT	L=3192				L=1800			R=30000 L=18275																					
VER. ALIGNMENT	R=130000				L=6494.27 G=-1.000%																								
CUT AND FILL	+10.8	+11.7	+11.8	+11.4	+10.0	+9.5	+9.5	+9.3	+9.2	+7.8	+5.5	+3.1	-0.1	-1.7	-3.8	-5.0	-5.5	-4.1	-1.3	+10.6	+24.2	+24.3	+38.6	+47.8	+58.3	+51.6	+68.7	+84.2	+61.8
TYP. SECTION	EMBANKMENT (F)										CUT (C)					VIADUCT (E)													

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

REV	DATE	BY	CHK	APP	DESCRIPTION

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Dallas, Texas 75204
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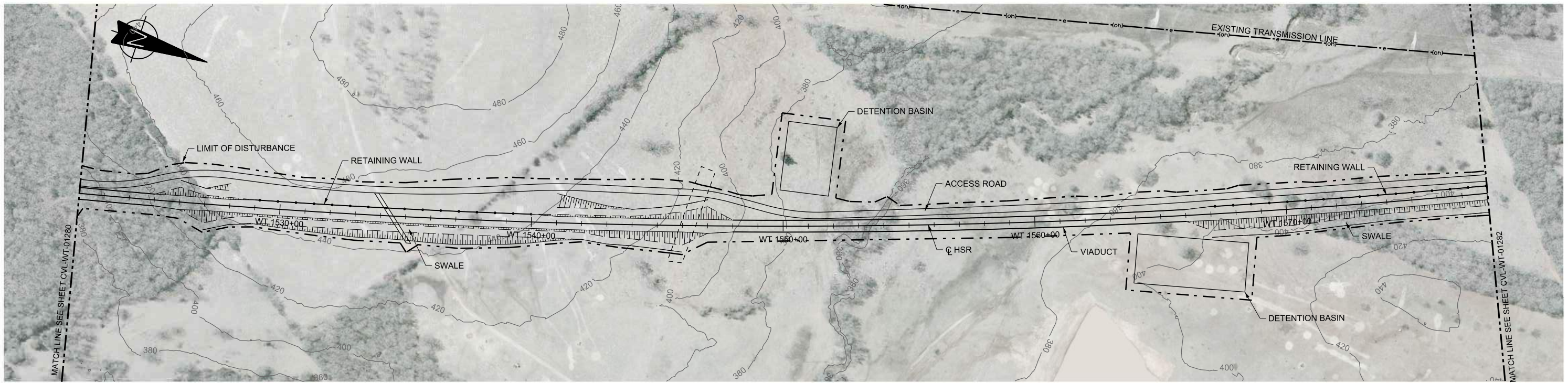
Client
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 1466+00 TO WT 1522+00**

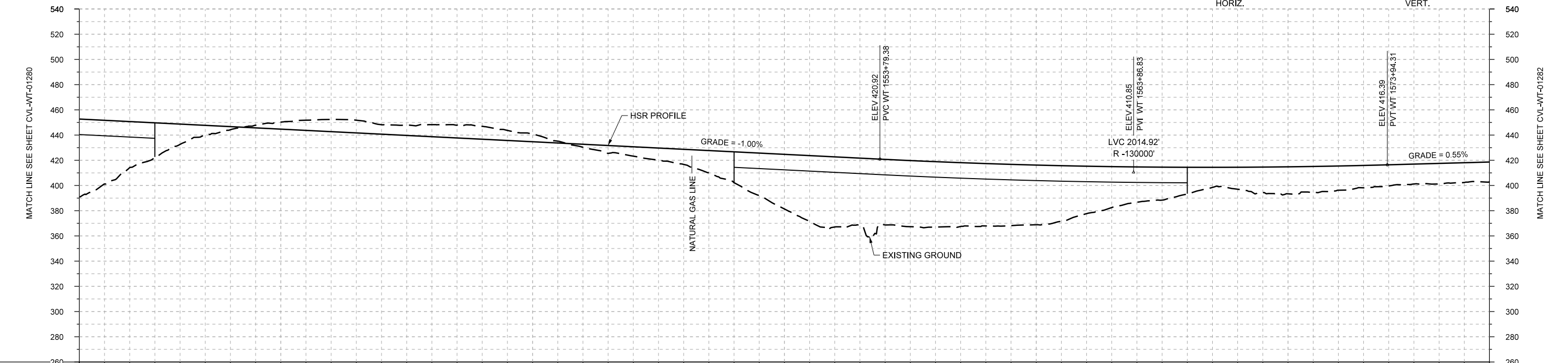
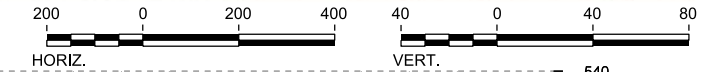
Scale
AS SHOWN

Drawing Status
FINAL DRAFT

Job No	Drawing No	Rev
234180	CVL-WT-01280	01



PLAN



PROFILE

STATIONING	WT 1522+00	WT 1530+00	WT 1540+00	WT 1550+00	WT 1560+00	WT 1570+00	WT 1578+00																						
HOR. ALIGNMENT	R=30000 L=18275																												
VER. ALIGNMENT	L=6494.27 G=-1.000%																												
CUT AND FILL	+61.8	+36.5	+16.1	+2.4	-5.6	-9.7	-7.6	-9.6	-10.2	-6.1	+2.3	+7.4	+12.0	+24.5	+43.3	+55.6	+52.0	+51.9	+49.5	+47.3	+37.6	+26.0	+21.1	+17.4	+21.4	+19.2	+16.7	+16.0	+15.6
TYP. SECTION	VIADUCT (E)		EMBANKMENT (A)		CUT (C)			EMBANKMENT (A)			VIADUCT (E)			EMBANKMENT (F)															

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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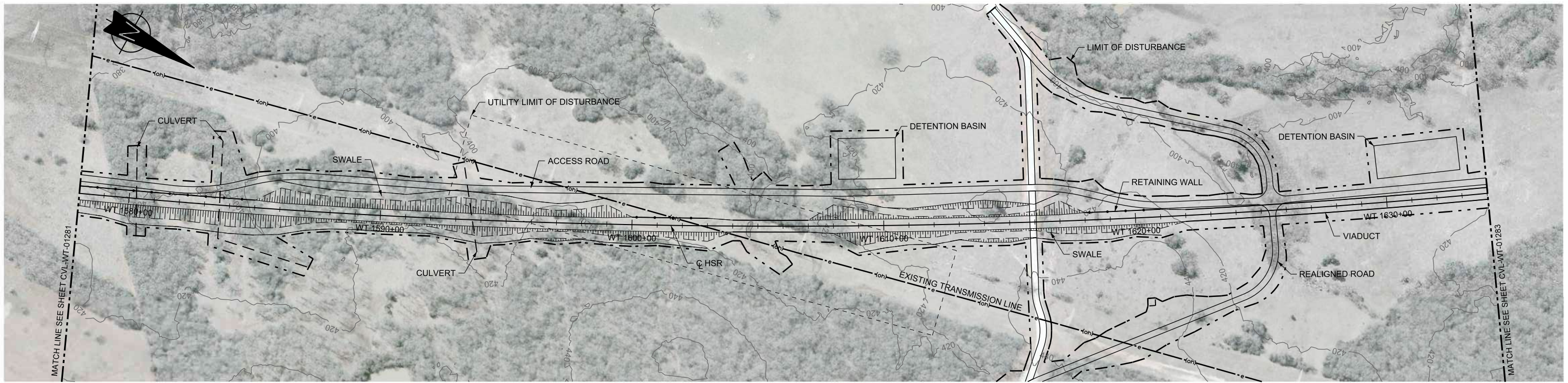
FREESSE AND NICHOLS
 2711 North Haskell Ave., Suite 3300
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Client

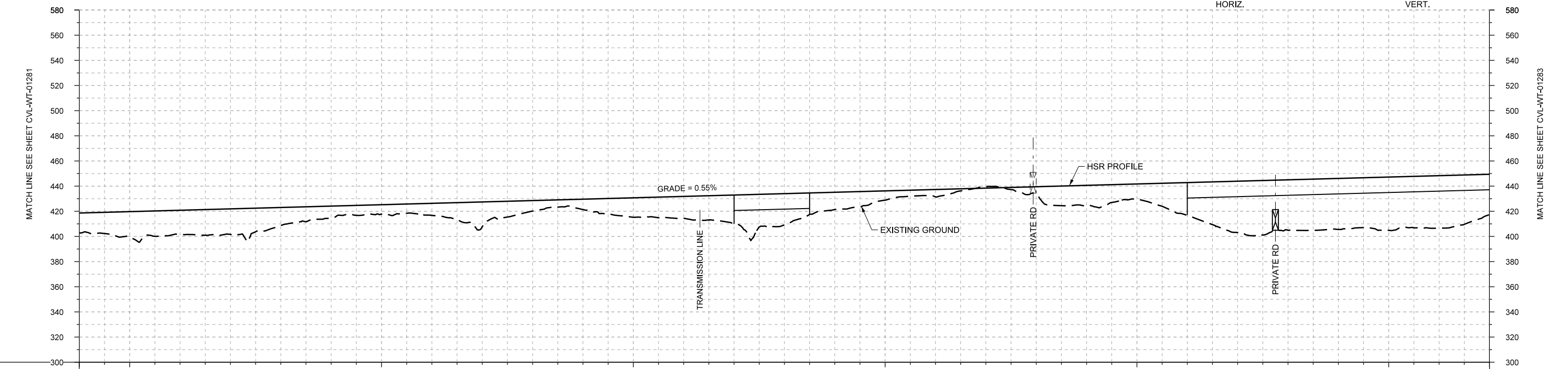
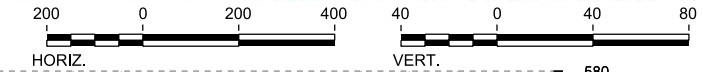
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 1522+00 TO WT 1578+00

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01281
Rev	01



PLAN



PROFILE

STATIONING	WT 1578+00	WT 1580+00		WT 1590+00		WT 1600+00		WT 1610+00		WT 1620+00		WT 1630+00	WT 1634+00																
HOR. ALIGNMENT	R=30000 L=18275																												
VER. ALIGNMENT	L=6746.19 G=0.550%																												
CUT AND FILL	+15.6	+20.1	+19.3	+20.3	+14.3	+9.6	+7.4	+9.6	+19.7	+8.3	+8.2	+15.5	+17.5	+23.0	+24.8	+13.7	+7.4	+5.8	-1.1	+6.3	+15.8	+12.0	+25.0	+40.8	+40.1	+40.6	+42.4	+41.7	+32.1
TYP. SECTION	EMBANKMENT (F)													VIADUCT (E)		EMBANKMENT (F)		CUT (H)		EMBANKMENT (F)		VIADUCT (E)							

REV	DATE	BY	CHK	APP	DESCRIPTION

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

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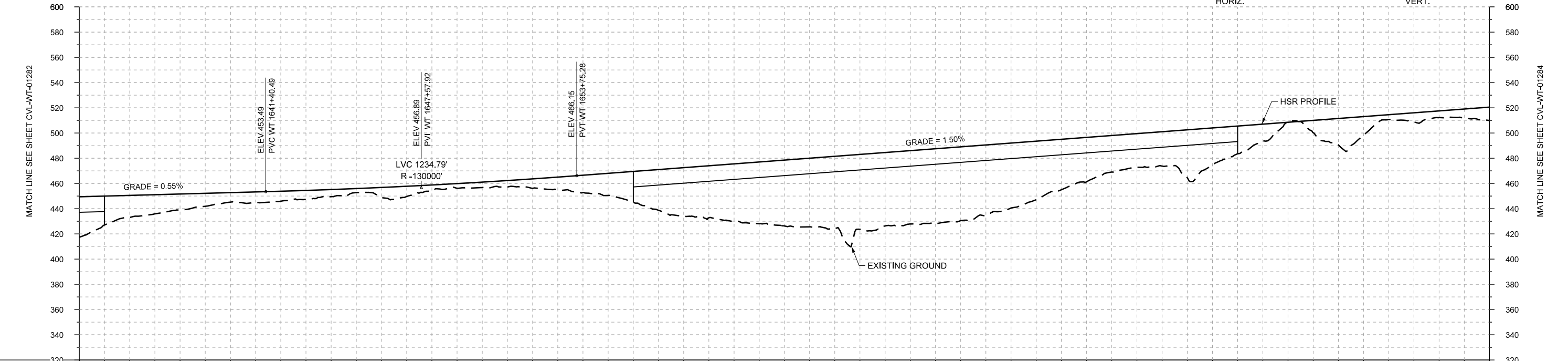
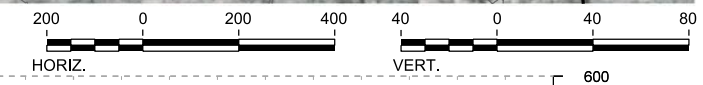
TEXAS CENTRAL
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 1578+00 TO WT 1634+00

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01282
Rev	01



PLAN



PROFILE

STATIONING	WT 1634+00	WT 1640+00	WT 1650+00	WT 1660+00	WT 1670+00	WT 1680+00	WT 1690+00																						
HOR. ALIGNMENT	R=30000 L=18275																												
VER. ALIGNMENT	L=6746.19 G=0.550%			R=130000		L=7665.01 G=1.500%																							
CUT AND FILL	+32.1	+17.5	+12.6	+7.5	+7.9	+5.7	+7.7	+4.8	+4.3	+7.5	+13.7	+24.4	+38.6	+45.7	+52.2	+57.4	+58.2	+58.8	+55.7	+48.4	+35.2	+26.6	+37.9	+22.0	-0.6	+20.9	+3.8	+5.3	+10.6
TYP. SECTION	(E) EMBANKMENT (A)		RETAINED FILL (B) (C)		EMBANKMENT (A)			VIADUCT (E)					CUT (C)		(A)		(B)		(C)		EMBANKMENT (A)								

REV	DATE	BY	CHK	APP	DESCRIPTION

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

ARUP

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Texas Registered Engineering Firm: F-1990

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2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

Client

TEXAS CENTRAL

1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title

WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 1634+00 TO WT 1690+00

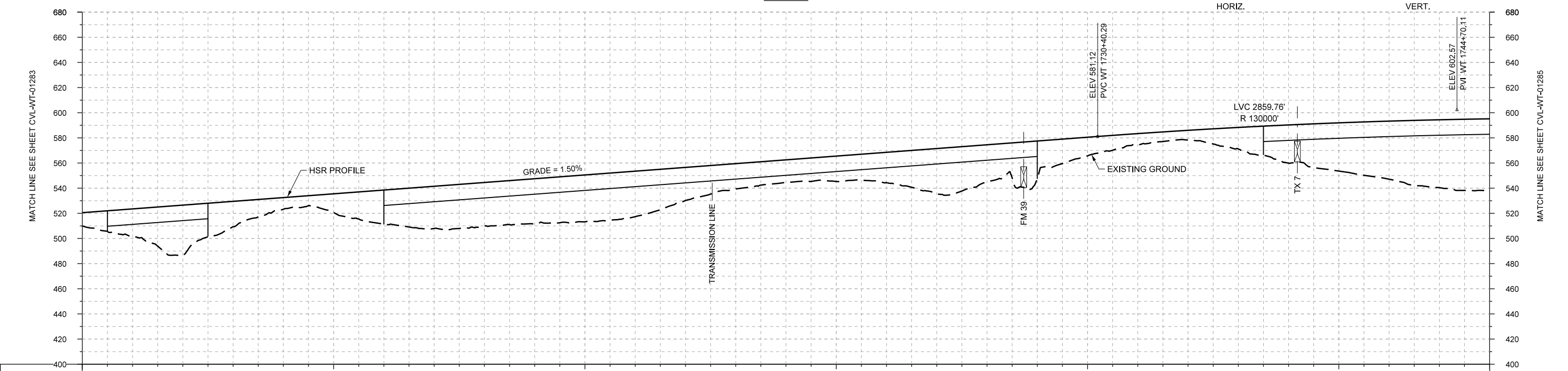
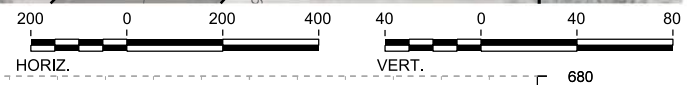
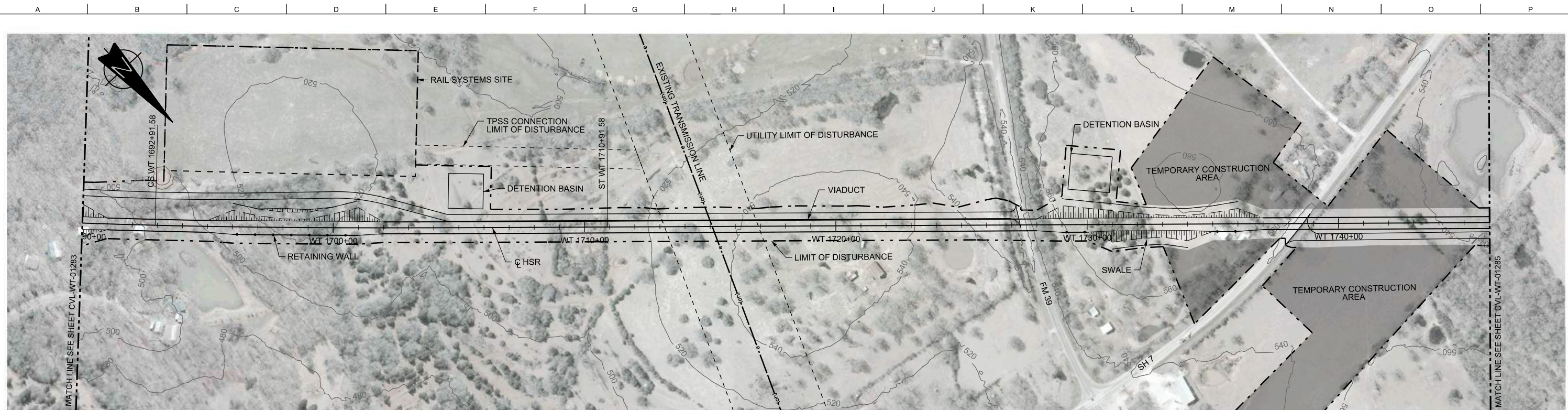
Scale

AS SHOWN

Drawing Status

FINAL DRAFT

Job No	Drawing No	Rev
234180	CVL-WT-01283	01



STATIONING	WT 1690+00	WT 1700+00	WT 1710+00	WT 1720+00	WT 1730+00	WT 1740+00	WT 1746+00																						
HOR. ALIGNMENT	R=30000 L=18275		L=1800		L=51194																								
VER. ALIGNMENT			L=7665.01 G=1.500%		R=130000																								
CUT AND FILL	+10.6	+22.5	+40.1	+20.2	+9.2	+15.0	+27.4	+33.5	+34.8	+36.0	+37.2	+36.1	+26.3	+20.1	+16.0	+20.2	+24.2	+36.0	+29.5	+30.2	+14.8	+9.0	+7.7	+17.1	+30.4	+38.4	+48.2	+54.0	+57.1
TYP. SECTION	(A)	VIADUCT (E)		EMBANKMENT (A)		VIADUCT (E)		EMBANKMENT (A)		VIADUCT (E)																			

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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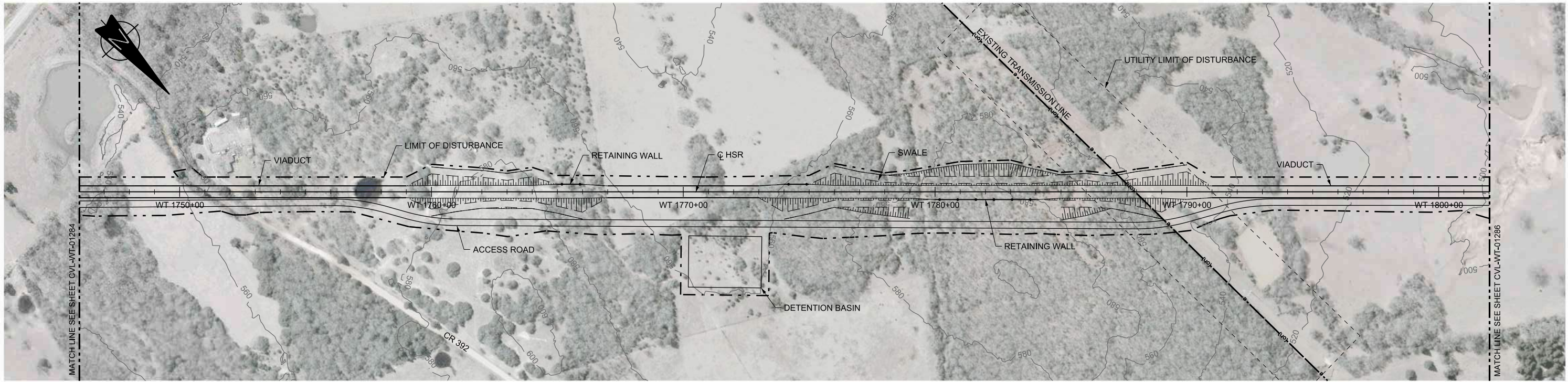
Client

TEXAS CENTRAL

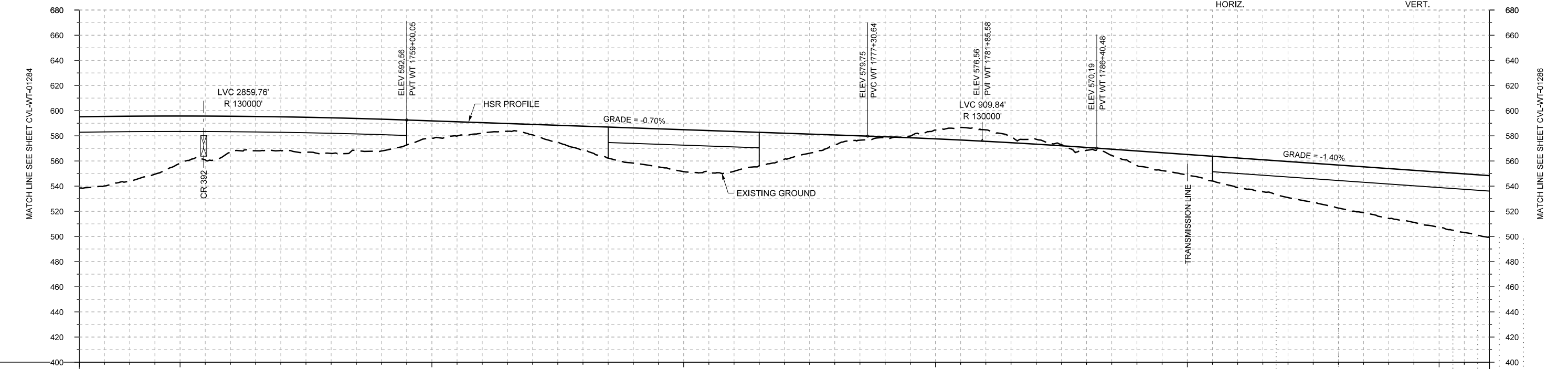
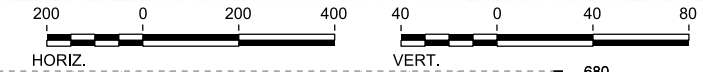
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 1690+00 TO WT 1746+00

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	Drawing No	Rev	
234180	CVL-WT-01284	01	



PLAN



PROFILE

STATIONING	WT 1746+00	WT 1750+00	WT 1760+00	WT 1770+00	WT 1780+00	WT 1790+00	WT 1800+00	WT 1802+00																					
HOR. ALIGNMENT	L=51194																												
VER. ALIGNMENT	R=130000		L=1830.59 G=-0.700%			R=130000		L=4126.00 G=-1.400%																					
CUT AND FILL	+57.1	+51.6	+37.5	+28.8	+26.7	+28.3	+25.3	+13.8	+8.5	+8.4	+18.7	+28.0	+33.4	+31.7	+20.7	+7.7	+1.0	-7.0	-9.2	-4.0	+2.3	+11.6	+18.4	+23.6	+28.7	+34.2	+38.7	+43.8	+48.7
TYP. SECTION	VIADUCT (E)			EMBANKMENT (A)			VIADUCT (E)			EMBANKMENT (A)			CUT (C)			EMBANKMENT (A)			VIADUCT (E)										

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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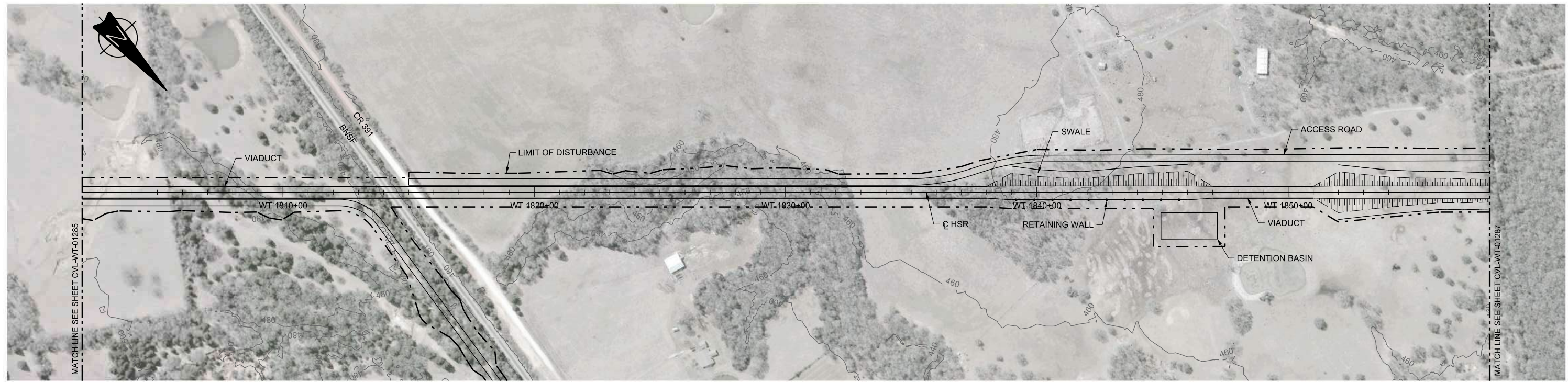
FRESE AND NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

Client

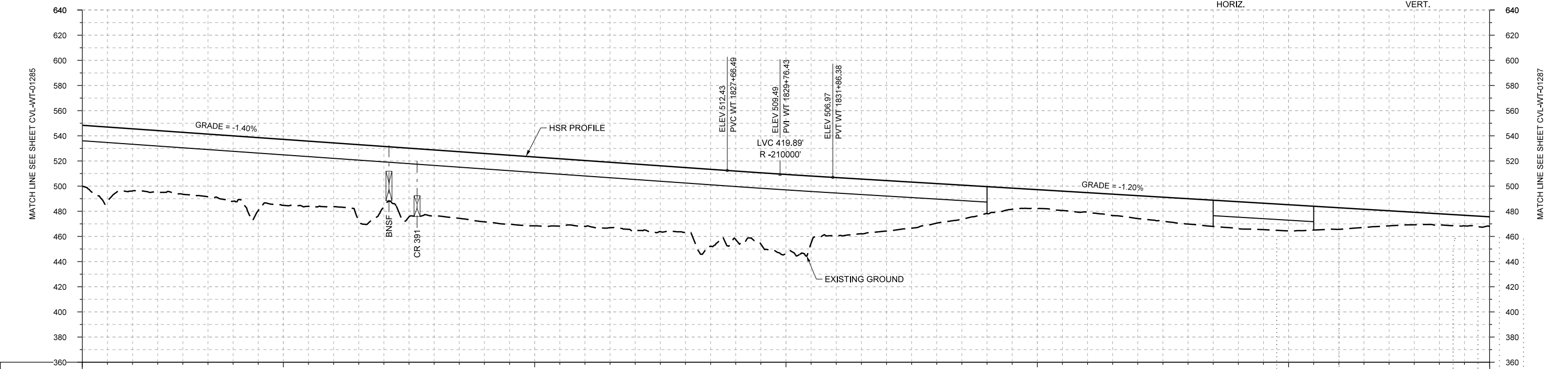
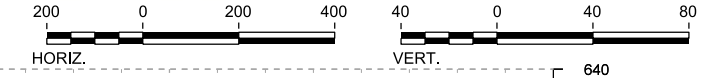
TEXAS CENTRAL
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 1746+00 TO WT 1802+00

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01285
Rev	01



PLAN



PROFILE

STATIONING	WT 1802+00	WT 1810+00	WT 1820+00	WT 1830+00	WT 1840+00	WT 1850+00	WT 1858+00
HOR. ALIGNMENT	L=51194						
VER. ALIGNMENT	L=4126.00 G=-1.400%			R=210000		L=7057.19 G=-1.200%	
CUT AND FILL	+48.7	+49.4	+49.3	+52.0	+52.5	+50.7	+48.3
TYP. SECTION	VIADUCT (E)			EMBANKMENT (A)		VIADUCT (E)	

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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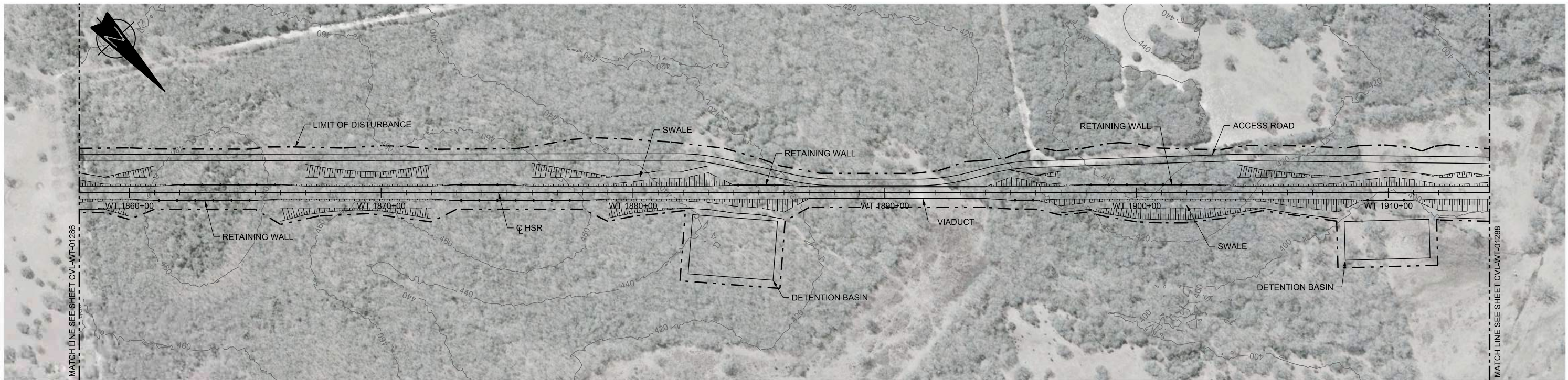
Client
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**WEST OF TEAGUE SEGMENT
CIVIL
PLAN AND PROFILE
WT 1802+00 TO WT 1858+00**

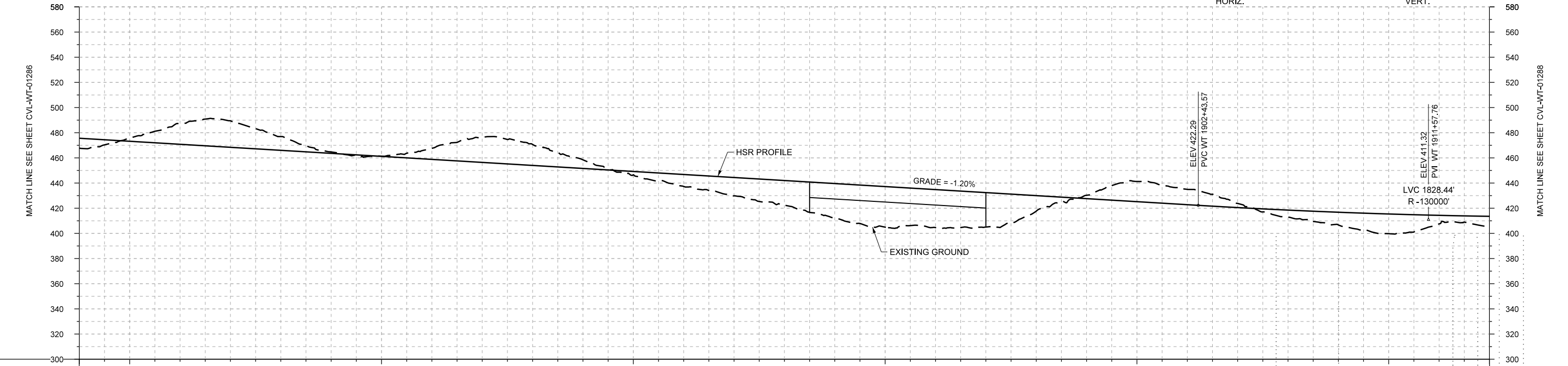
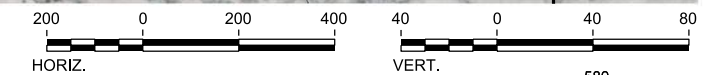
Scale
AS SHOWN

Drawing Status
FINAL DRAFT

Job No 234180	Drawing No CVL-WT-01286	Rev 01
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PLAN



PROFILE

STATIONING	WT 1858+00	WT 1860+00		WT 1870+00		WT 1880+00		WT 1890+00		WT 1900+00		WT 1910+00	WT 1914+00																
HOR. ALIGNMENT	L=51194																												
VER. ALIGNMENT	L=7057.19 G=-1.200%																												
CUT AND FILL	+7.7	-2.5	-16.6	-21.1	-10.9	-1.1	-0.1	-8.8	-19.9	-16.7	-6.9	+2.6	+9.5	+14.6	+19.6	+27.4	+32.3	+30.2	+27.4	+12.3	-2.7	-16.1	-12.2	-3.3	+5.5	+10.1	+15.6	+6.8	-8.6
TYP. SECTION	(A)	CUT (C)	RETAINED CUT (D)		CUT (C)		RETAINED CUT (D)		CUT (C)		EMBANKMENT (A)		EMBANKMENT (A)		VIADUCT (E)		EMBANKMENT (A)		(D)		CUT (C)		EMBANKMENT (A)						

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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Texas Registered Engineering Firm: F-2144

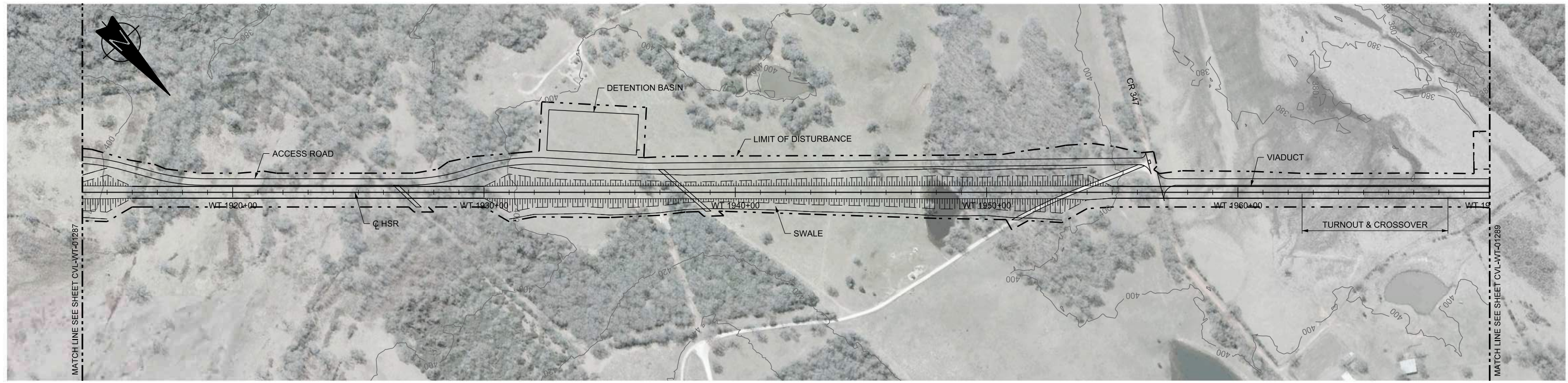
Client
TEXAS CENTRAL
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 1858+00 TO WT 1914+00**

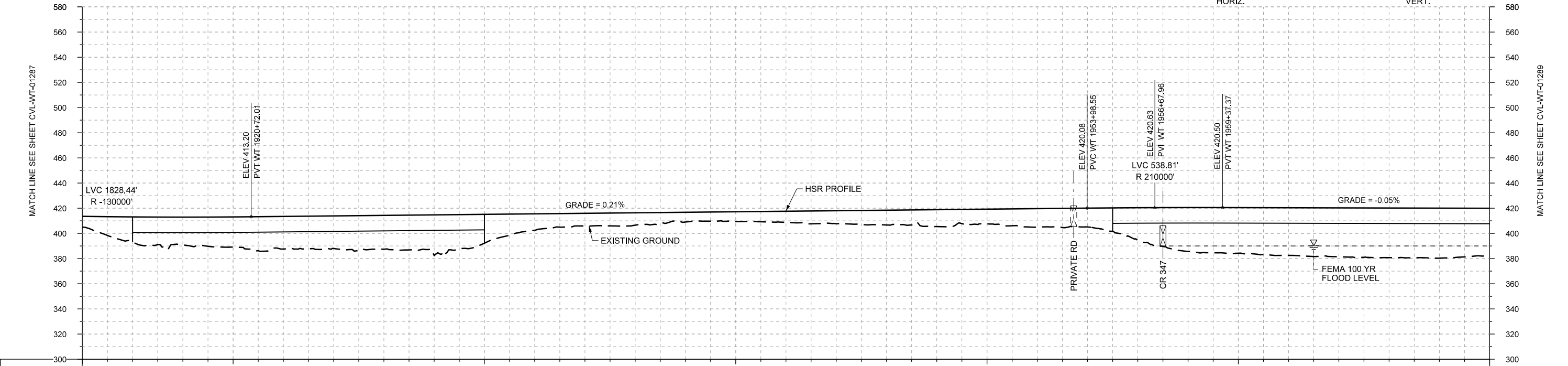
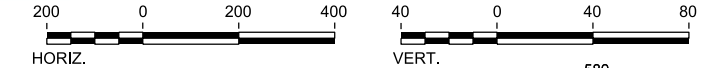
Scale
AS SHOWN

Drawing Status
FINAL DRAFT

Job No	Drawing No	Rev
234180	CVL-WT-01287	01



PLAN



STATIONING	WT 1914+00	WT 1920+00	WT 1930+00	WT 1940+00	WT 1950+00	WT 1960+00	WT 1970+00
HOR. ALIGNMENT	L=51194						
VER. ALIGNMENT	R=130000		L=3326.55 G=0.207%			R=210000	
CUT AND FILL	+8.6	+20.0	+22.1	+24.0	+25.9	+25.9	+32.3
TYP. SECTION	VIADUCT (E)		EMBANKMENT (A)			VIADUCT (E)	

PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

ARUP

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Texas Registered Engineering Firm: F-2144

Client

TEXAS CENTRAL

1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

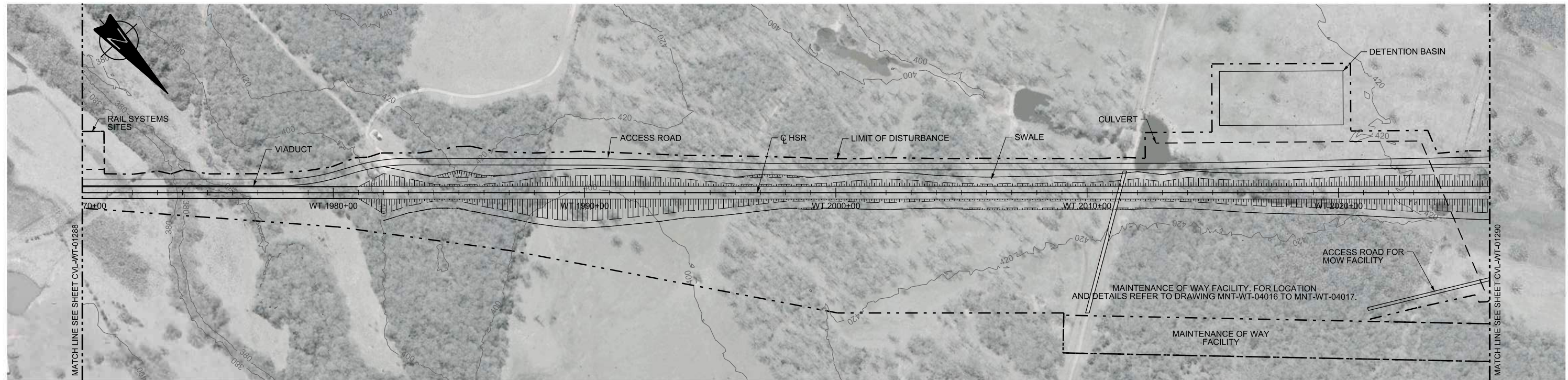
Drawing Title

WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 1914+00 TO WT 1970+00

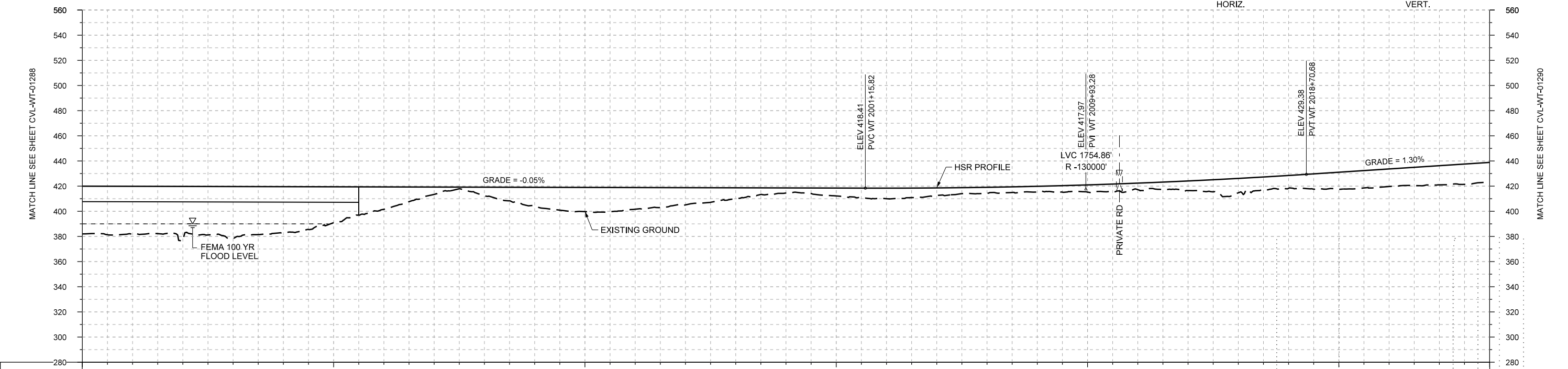
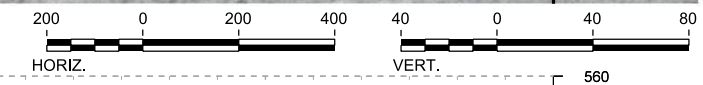
Scale
AS SHOWN

Drawing Status
FINAL DRAFT

Job No	Drawing No	Rev
234180	CVL-WT-01288	01



PLAN



STATIONING	WT 1970+00		WT 1980+00		WT 1990+00		WT 2000+00		WT 2010+00		WT 2020+00		WT 2026+00																
HOR. ALIGNMENT	L=51194																												
VER. ALIGNMENT	L=4178.45 G=-0.050%																												
CUT AND FILL	+36.0	+35.2	+42.8	+40.9	+36.9	+28.6	+17.8	+5.9	+6.8	+15.0	+19.3	+17.3	+13.7	+8.8	+4.1	+6.3	+8.4	+6.1	+4.7	+4.6	+5.8	+5.2	+7.6	+11.4	+10.2	+13.7	+14.0	+15.3	+15.9
TYP. SECTION	VIADUCT (E)				EMBANKMENT (A)			CUT (C)		EMBANKMENT (A)				CUT (C)		EMBANKMENT (A)													

PROFILE

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

REV	DATE	BY	CHK	APP	DESCRIPTION

ARUP

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www.freese.com
Texas Registered Engineering Firm: F-2144

Client

1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title

**WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 1970+00 TO WT 2026+00**

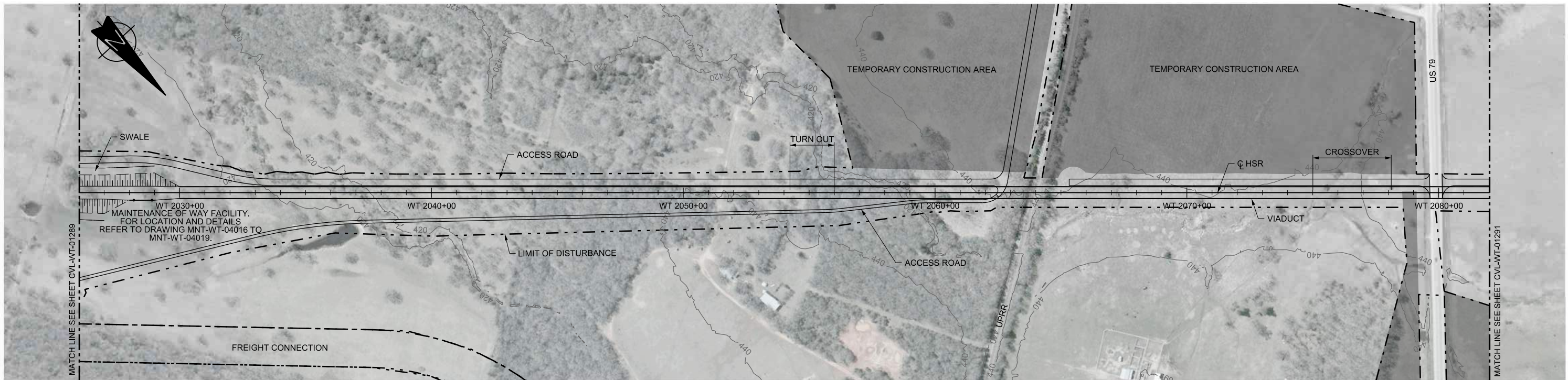
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AS SHOWN

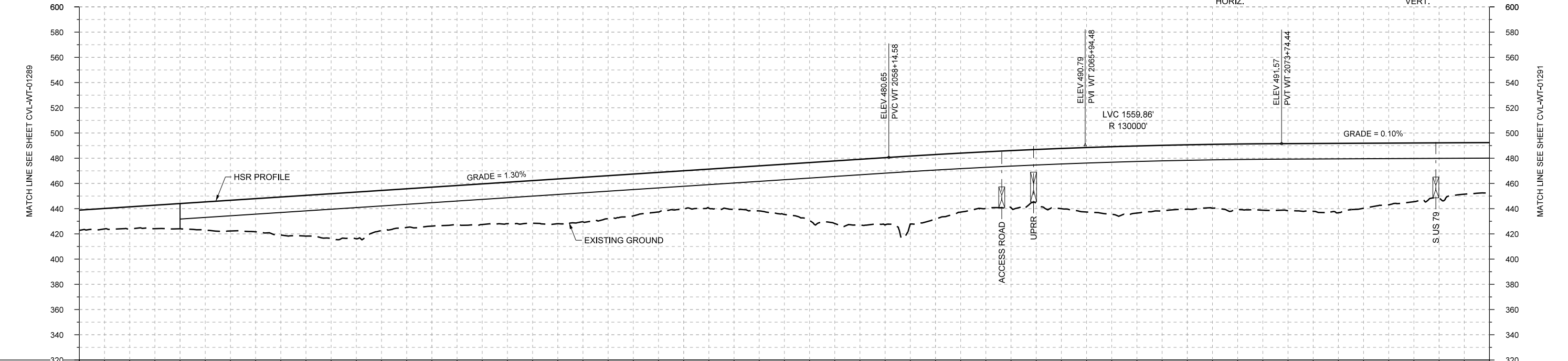
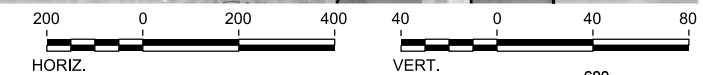
Drawing Status

FINAL DRAFT

Job No	Drawing No	Rev
234180	CVL-WT-01289	01



PLAN



PROFILE

STATIONING	WT 2026+00	WT 2030+00	WT 2040+00	WT 2050+00	WT 2060+00	WT 2070+00	WT 2080+00	WT 2082+00	
HOR. ALIGNMENT	L=51194								
VER. ALIGNMENT	L=3943.91 G=1.300%				R=130000			L=2629.72 G=0.100%	
CUT AND FILL	+15.9	+17.5	+20.1	+24.4	+30.2	+35.6	+31.9	+30.9	
TYP. SECTION	EMBANKMENT (A)			VIADUCT (E)					+40.0

REV	DATE	BY	CHK	APP	DESCRIPTION

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

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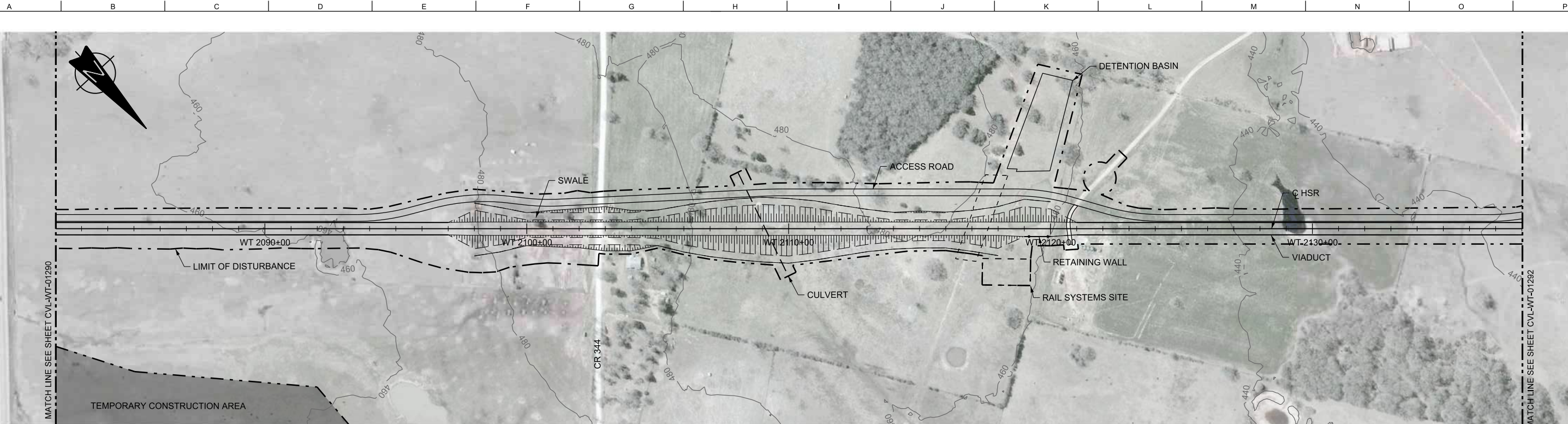
FREESSE AND NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

Client

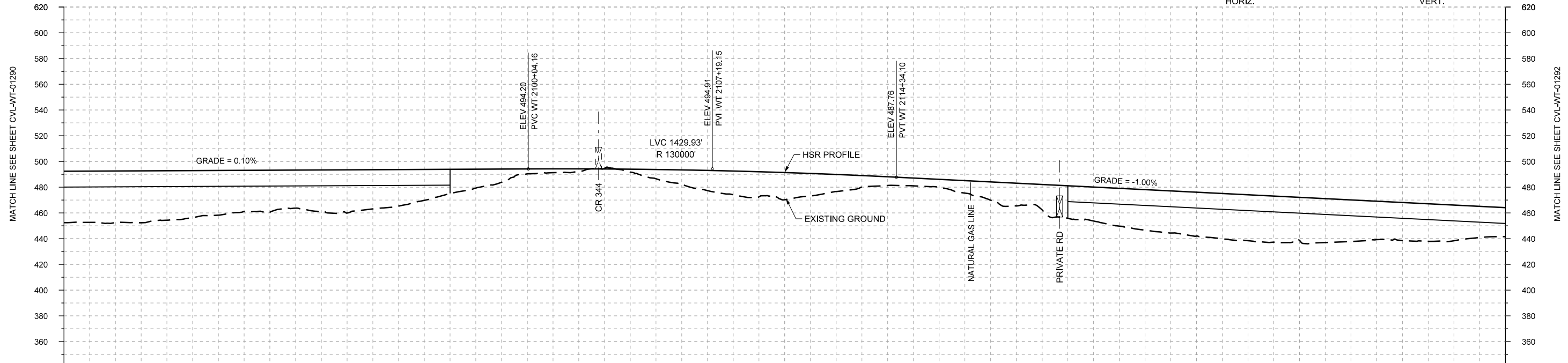
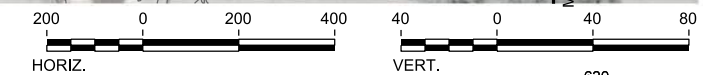
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE
 WT 2026+00 TO WT 2082+00

Scale
 AS SHOWN
 Drawing Status
FINAL DRAFT
 Job No 234180 Drawing No CVL-WT-01290 Rev 01



PLAN



PROFILE

STATIONING	WT 2082+00	WT 2090+00	WT 2100+00	WT 2110+00	WT 2120+00	WT 2130+00	WT 2138+00	
HOR. ALIGNMENT	L=51194							
VER. ALIGNMENT	L=2629.72 G=0.100%			R=130000		L=2527.23 G=-1.000%		
CUT AND FILL	+40.0	+40.2	+38.4	+34.7	+32.7	+32.3	+30.5	
			+24.0	+14.7	+3.8	+2.2	+2.3	
			+10.7	+18.4	+21.2	+13.3	+6.8	
			+6.2	+14.2	+13.7	+26.4	+31.5	
			+34.1	+35.7	+33.4	+32.3	+29.5	
			+27.7	+22.6				
TYP. SECTION	VIADUCT (E)		EMBANKMENT (A)		CUT (C)		EMBANKMENT (A)	
							VIADUCT (E)	

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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FRESE AND NICHOLS

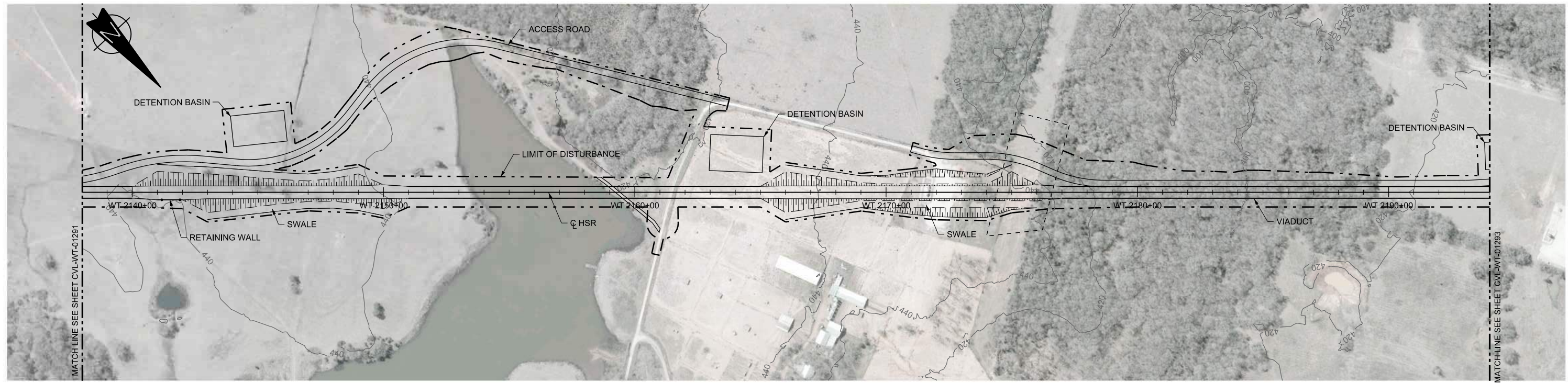
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
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Texas Registered Engineering Firm: F-2144

Client

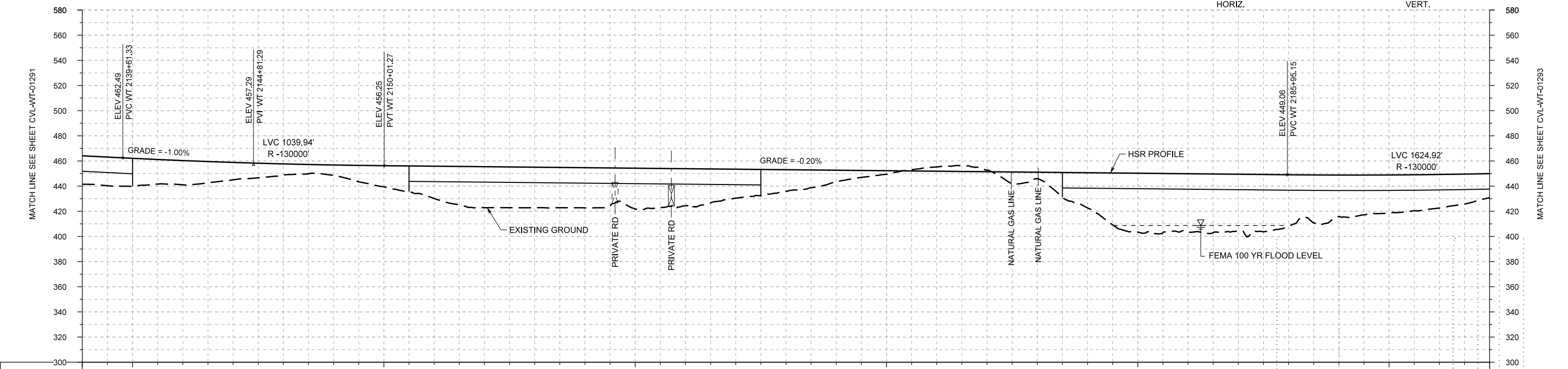
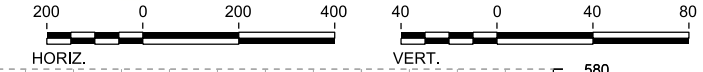
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 2082+00 TO WT 2138+00

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	234180	Drawing No	CVL-WT-01291
			01



PLAN



STATIONING	WT 2138+00	WT 2140+00	WT 2150+00	WT 2160+00	WT 2170+00	WT 2180+00	WT 2190+00	WT 2194+00																					
HOR. ALIGNMENT	L=51194																												
VER. ALIGNMENT	L=2527.23 G=-1.000%		R=130000			L=3593.89 G=-0.200%		R=130000																					
CUT AND FILL	+22.6	+22.3	+19.2	+13.8	+8.8	+8.3	+16.9	+25.7	+32.6	+32.3	+32.0	+32.6	+29.5	+23.0	+17.1	+9.1	+2.9	-3.4	-1.3	+5.0	+28.0	+46.8	+46.4	+44.8	+41.0	+33.1	+30.3	+26.7	+19.1
TYP. SECTION	(E)		EMBANKMENT (A)			VIADUCT (E)			EMBANKMENT (A)			CUT (C)			VIADUCT (E)														

PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

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

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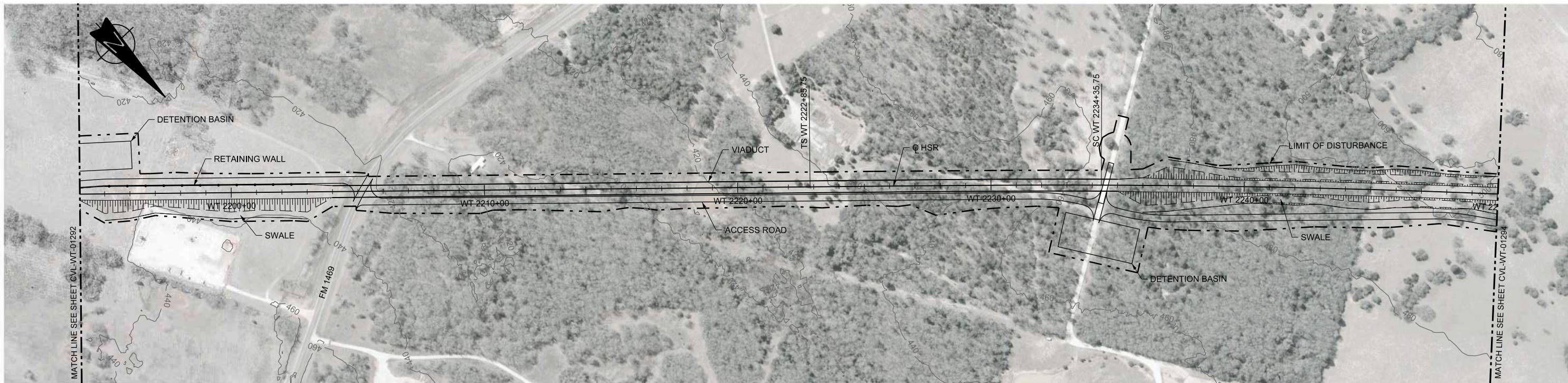
FREESSE AND NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

Client

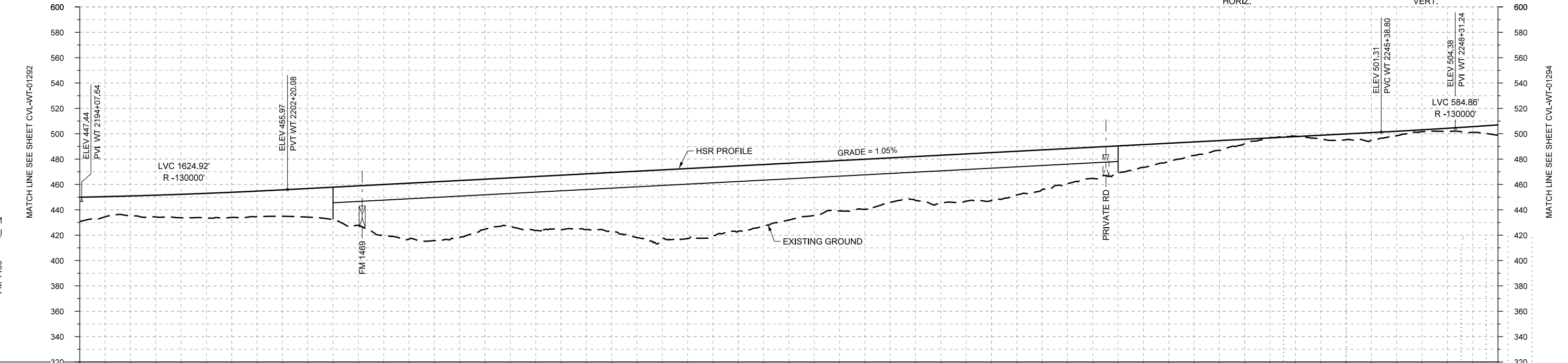
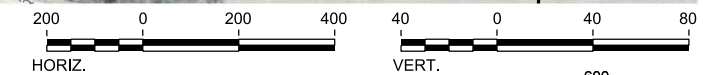
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 2138+00 TO WT 2194+00

Scale
 AS SHOWN
 Drawing Status
FINAL DRAFT
 Job No. 234180 Drawing No. CVL-WT-01292 Rev 01



PLAN



PROFILE

STATIONING	WT 2194+00	WT 2200+00	WT 2210+00	WT 2220+00	WT 2230+00	WT 2240+00	WT 2250+00																						
HOR. ALIGNMENT	L=51194			L=1150		R=42000 L=11243																							
VER. ALIGNMENT	R=130000		L=4318.73 G=1.050%			R=130000																							
CUT AND FILL	+19.1	+15.5	+18.4	+19.8	+20.9	+25.6	+39.8	+46.4	+39.5	+42.5	+44.0	+52.3	+55.2	+51.5	+44.9	+39.8	+35.2	+36.2	+37.6	+31.4	+24.8	+18.1	+10.7	+3.5	-0.3	+4.5	+3.6	+2.4	+8.2
TYP. SECTION	EMBANKMENT (A)				VIADUCT (E)								EMBANKMENT (A)		CUT (C)	EMBANKMENT (A)	CUT (C)	(A)											

REV	DATE	BY	CHK	APP	DESCRIPTION

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

ARUP
 Arup Texas, Inc.
 10370 Richmond Ave., Suite 475
 Houston, Texas 77042 USA
 Tel (713) 783 2787 Fax (713) 343 1467
 www.arup.com
 Texas Registered Engineering Firm: F-1990

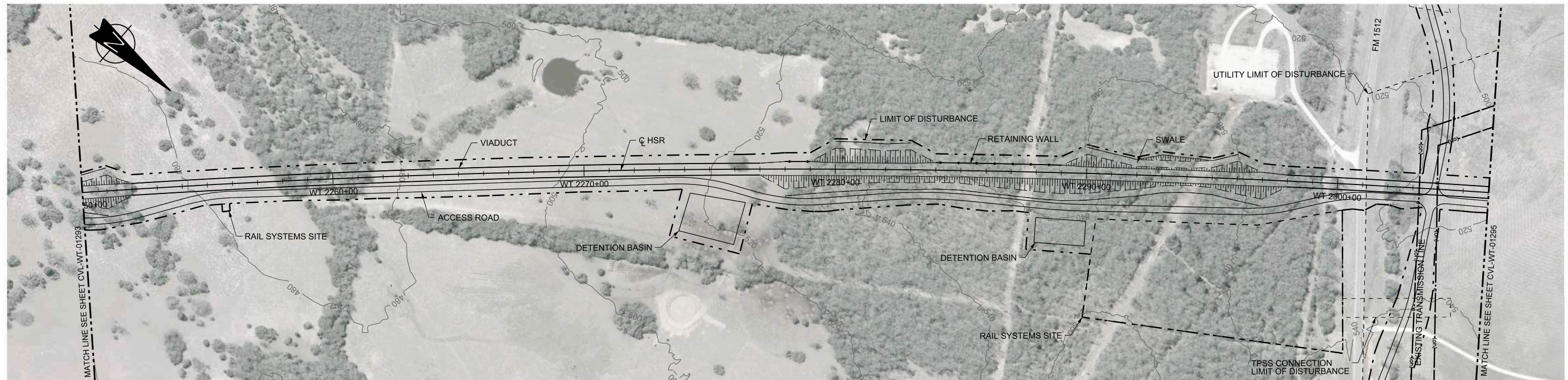
FRESE AND NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

Client

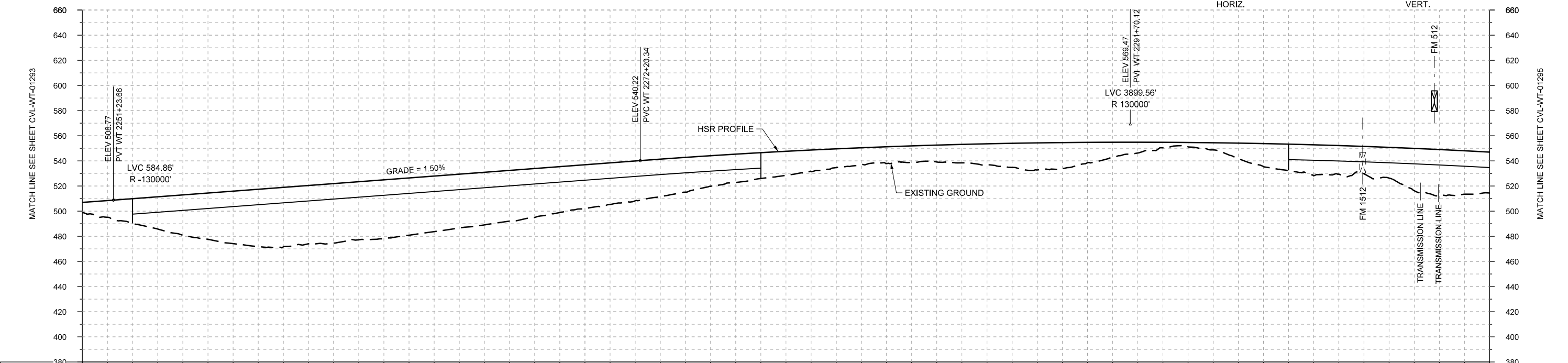
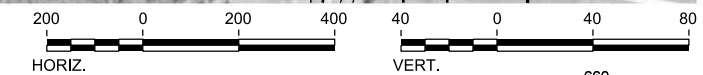
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 2194+00 TO WT 2250+00

Scale	AS SHOWN	
Drawing Status	FINAL DRAFT	
Job No	Drawing No	Rev
234180	CVL-WT-01293	01



PLAN



STATIONING	WT 2250+00	WT 2260+00	WT 2270+00	WT 2280+00	WT 2290+00	WT 2300+00	WT 2306+00																						
HOR. ALIGNMENT					R=42000 L=11243																								
VER. ALIGNMENT	R=130000 L=2096.68 G=1.500%			R=130000																									
CUT AND FILL	+8.2	+19.8	+32.0	+41.7	+47.3	+47.4	+46.6	+44.2	+41.8	+38.9	+34.9	+31.7	+27.7	+22.6	+19.1	+14.9	+13.4	+13.5	+17.0	+21.5	+16.2	+8.5	+3.5	+12.3	+21.1	+22.8	+24.5	+36.9	+32.6
TYP. SECTION	(A)		VIADUCT (E)										EMBANKMENT (A)					VIADUCT (E)											

PROFILE

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

REV	DATE	BY	CHK	APP	DESCRIPTION

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Tel (214) 217 2200 Fax (214) 217 2201
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1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title

**WEST OF TEAGUE SEGMENT
CIVIL
PLAN AND PROFILE
WT 2250+00 TO WT 2306+00**

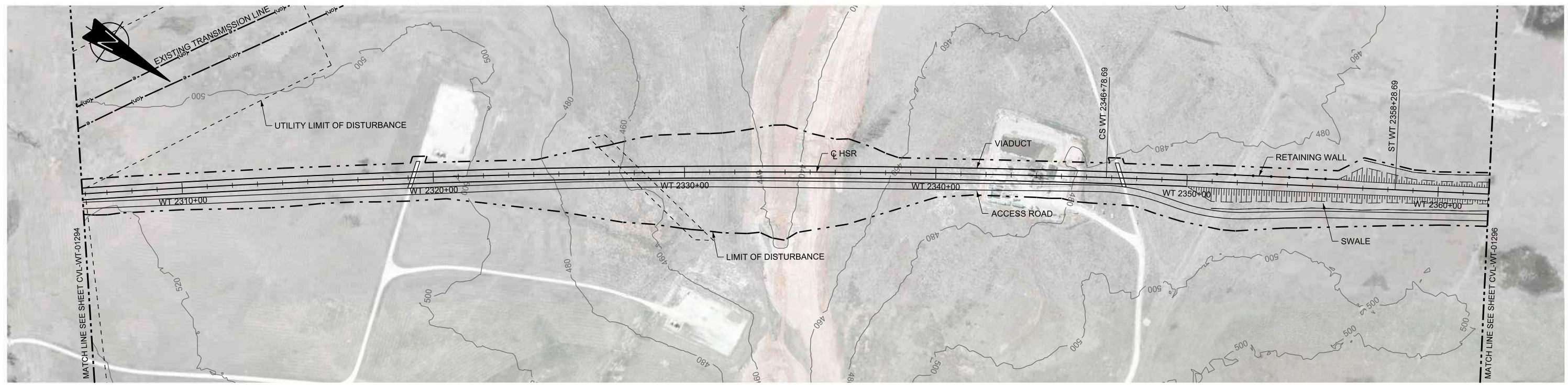
Scale

AS SHOWN

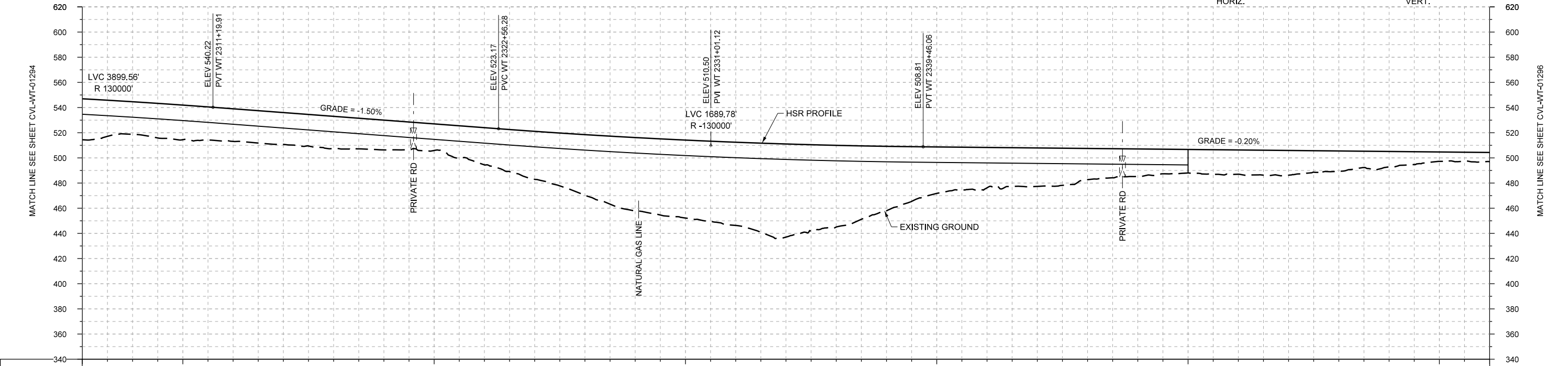
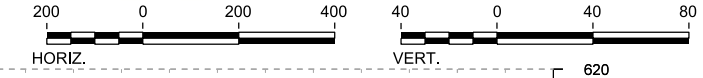
Drawing Status

FINAL DRAFT

Job No	234180	Drawing No	CVL-WT-01294	Rev	01
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PLAN



STATIONING	WT 2306+00	WT 2310+00	WT 2320+00	WT 2330+00	WT 2340+00	WT 2350+00	WT 2360+00	WT 2362+00																					
HOR. ALIGNMENT				R=42000 L=11243				L=1150 L=34770																					
VER. ALIGNMENT	R=130000 L=1136.37 G=-1.500%		R=-130000			L=2275.90 G=-0.200%																							
CUT AND FILL	+32.6	+25.8	+27.5	+25.9	+25.3	+25.5	+23.7	+21.1	+29.6	+38.2	+48.2	+56.0	+61.9	+66.1	+74.1	+65.0	+51.2	+36.9	+32.1	+30.6	+24.8	+21.9	+18.7	+19.3	+19.7	+16.0	+12.3	+7.5	+7.3
TYP. SECTION	VIADUCT (E)															EMBANKMENT (A)													

PROFILE

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

REV	DATE	BY	CHK	APP	DESCRIPTION



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www.freese.com
Texas Registered Engineering Firm: F-2144

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1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title

WEST OF TEAGUE SEGMENT
CIVIL
PLAN AND PROFILE
WT 2306+00 TO WT 2362+00

Scale

AS SHOWN

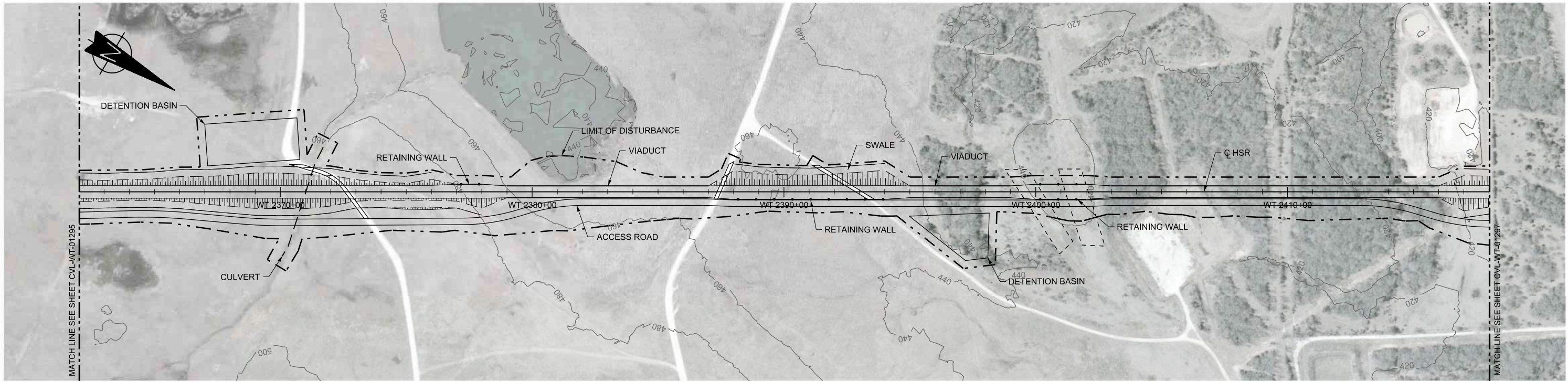
Drawing Status

FINAL DRAFT

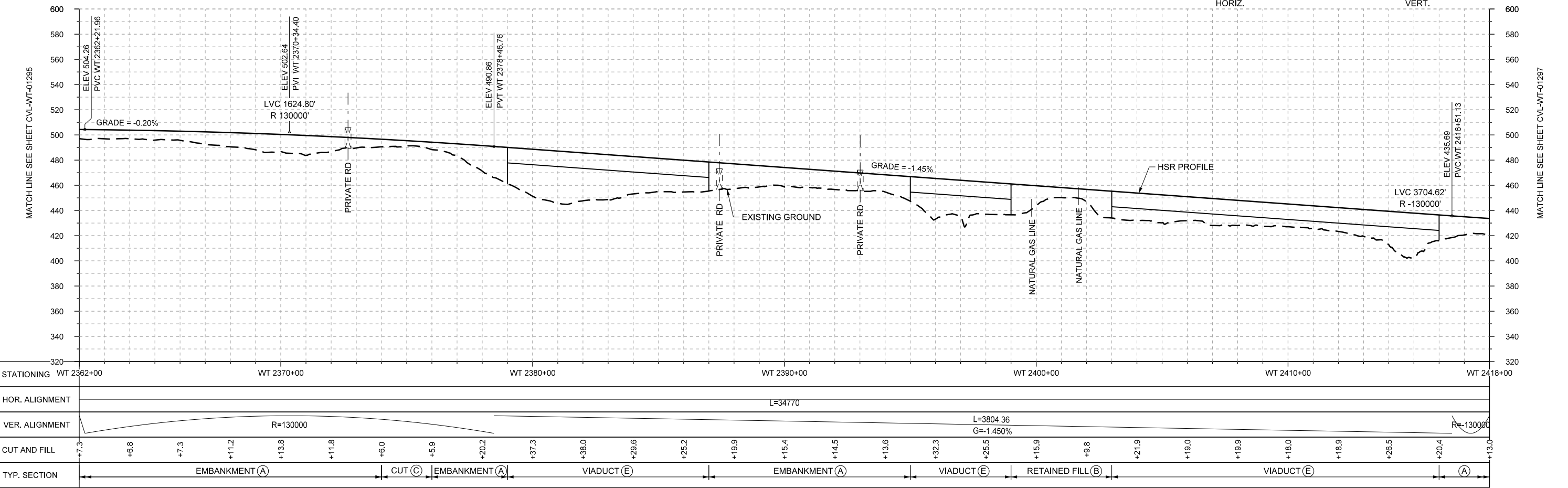
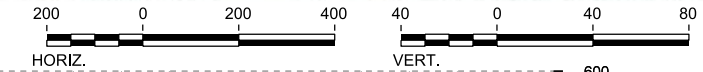
Job No
234180

Drawing No
CVL-WT-01295

Rev
01



PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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Texas Registered Engineering Firm: F-2144

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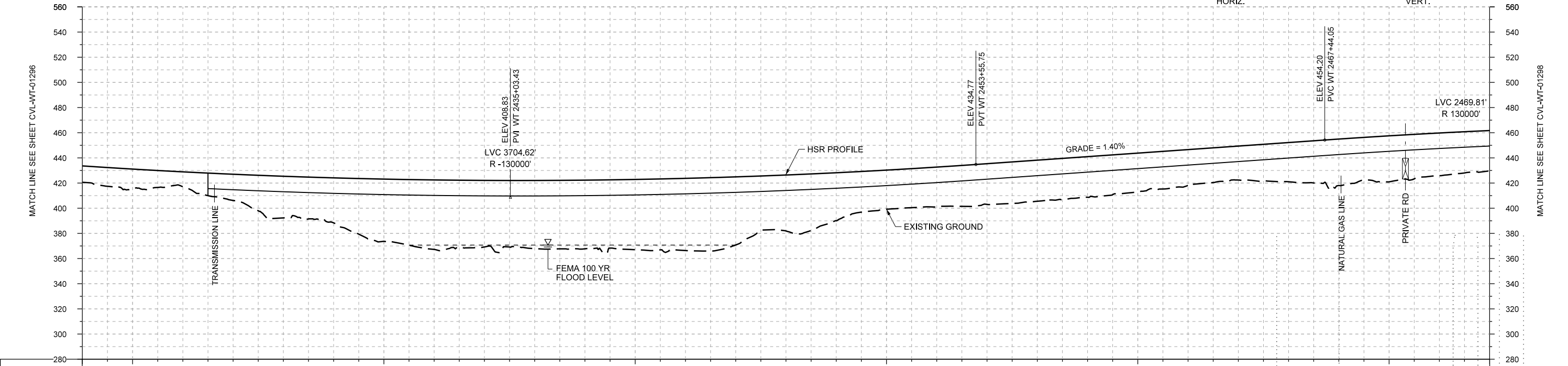
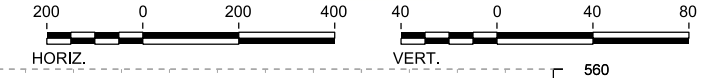
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 2362+00 TO WT 2418+00

Scale AS SHOWN		
Drawing Status FINAL DRAFT		
Job No 234180	Drawing No CVL-WT-01296	Rev 01



PLAN



STATIONING	WT 2418+00	WT 2420+00	WT 2430+00	WT 2440+00	WT 2450+00	WT 2460+00	WT 2470+00	WT 2474+00																					
HOR. ALIGNMENT	L=34770																												
VER. ALIGNMENT	R=130000																												
CUT AND FILL	+13.0	+15.4	+11.9	+20.9	+33.1	+35.7	+49.4	+55.2	+52.9	+54.1	+54.5	+55.9	+57.3	+54.1	+44.4	+36.2	+31.0	+31.8	+32.3	+32.6	+32.3	+30.9	+28.3	+27.0	+31.2	+36.9	+36.6	+33.9	+32.0
TYP. SECTION	EMBANKMENT (A)			VIADUCT (E)																									

PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

ARUP

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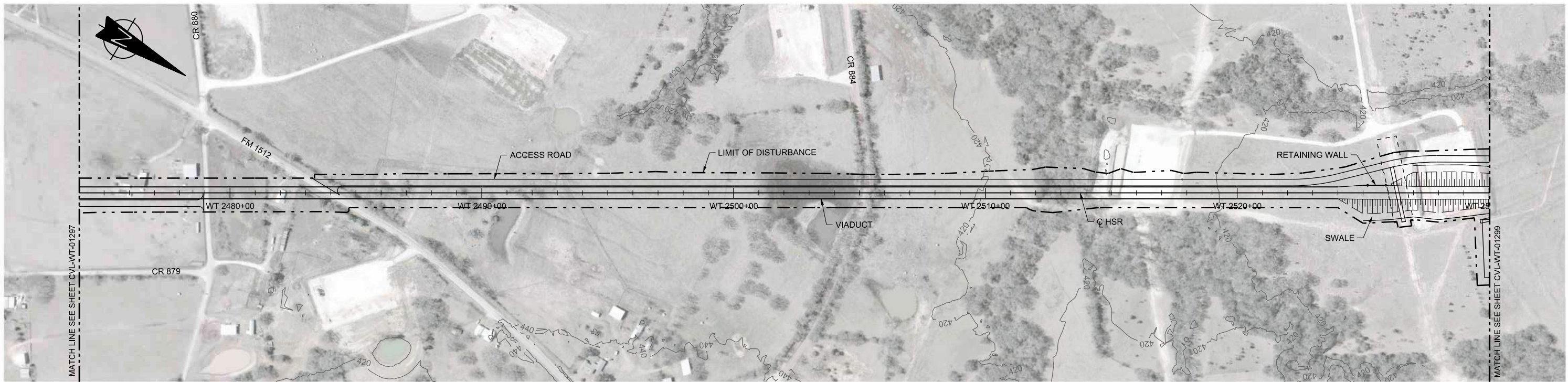
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TEXAS CENTRAL

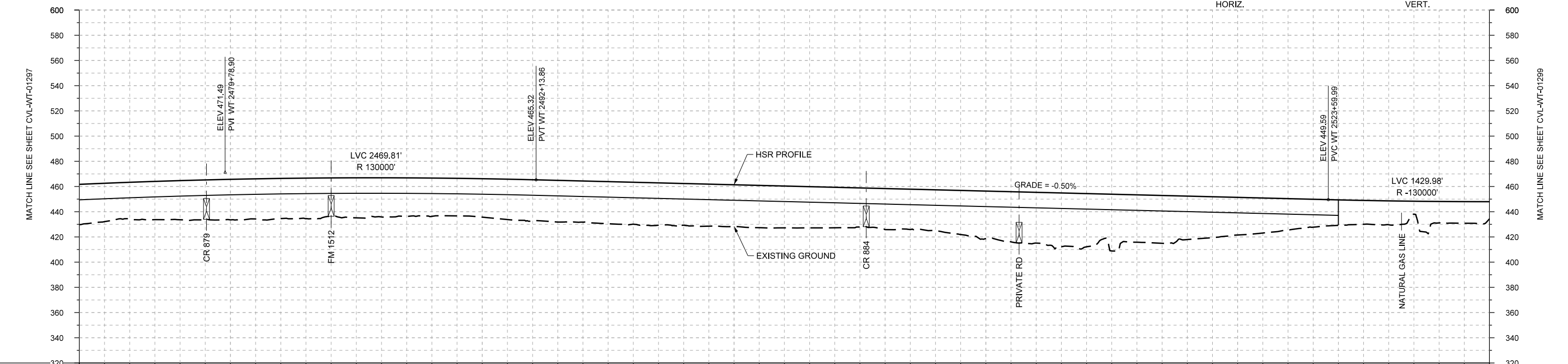
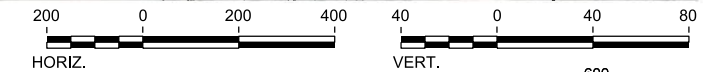
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 2418+00 TO WT 2474+00

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01297
Rev	01



PLAN



PROFILE

STATIONING	WT 2474+00	WT 2480+00	WT 2490+00	WT 2500+00	WT 2510+00	WT 2520+00	WT 2530+00	
HOR. ALIGNMENT	L=34770							
VER. ALIGNMENT	R=130000			L=3146.13 G=-0.500%		R=130000		
CUT AND FILL	+32.0	+29.3	+31.1	+32.1	+31.8	+30.4	+31.0	
TYP. SECTION	VIADUCT (E)						EMBANKMENT (A)	

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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Texas Registered Engineering Firm: F-2144

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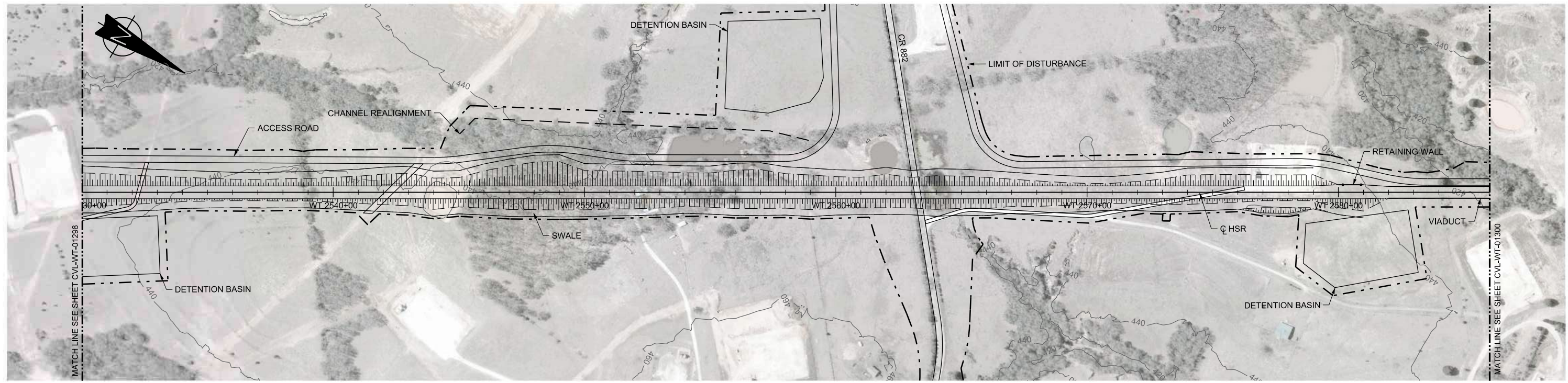
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1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

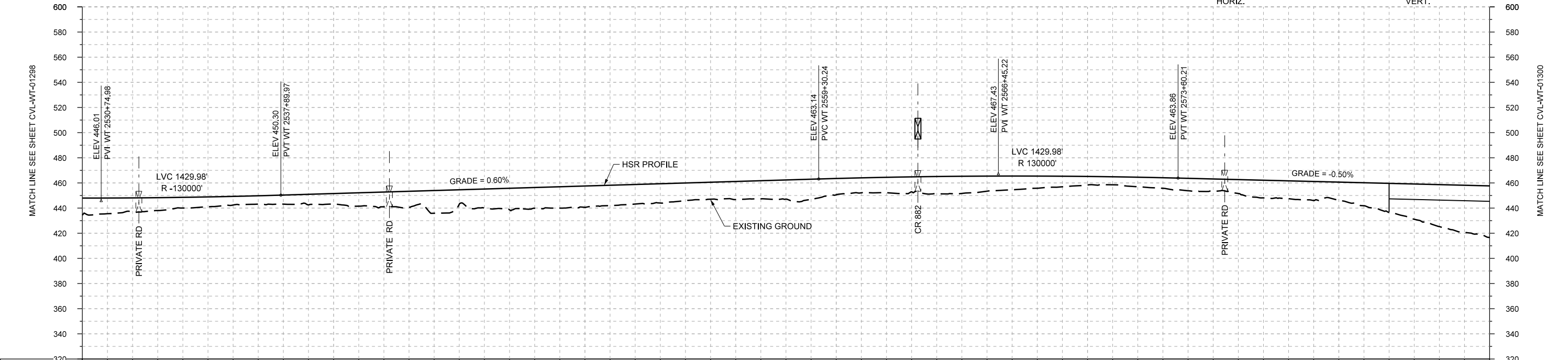
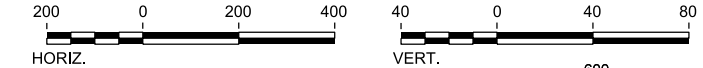
Drawing Title

**WEST OF TEAGUE SEGMENT
CIVIL
PLAN AND PROFILE
WT 2474+00 TO WT 2530+00**

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	234180	Drawing No	CVL-WT-01298
Rev			01



PLAN



STATIONING	WT 2530+00	WT 2540+00	WT 2550+00	WT 2560+00	WT 2570+00	WT 2580+00	WT 2586+00	
HOR. ALIGNMENT	L=34770							
VER. ALIGNMENT	R=130000		L=2140.27 G=0.600%			R=130000		
CUT AND FILL	+13.6	+10.9	+8.5	+6.9	+7.3	+8.4	+11.8	
TYP. SECTION	EMBANKMENT (A)						VIADUCT (E)	

PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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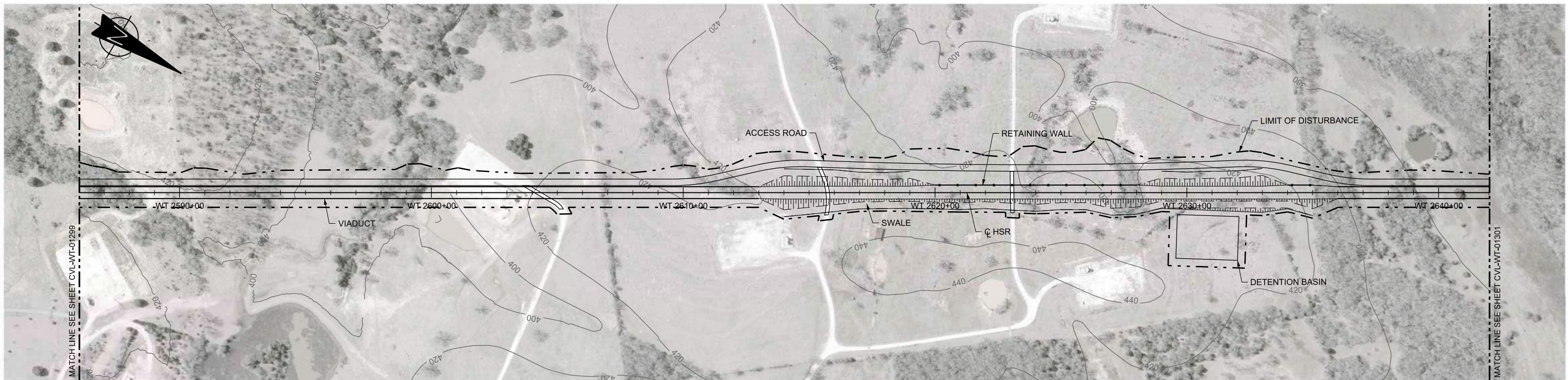
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TEXAS CENTRAL

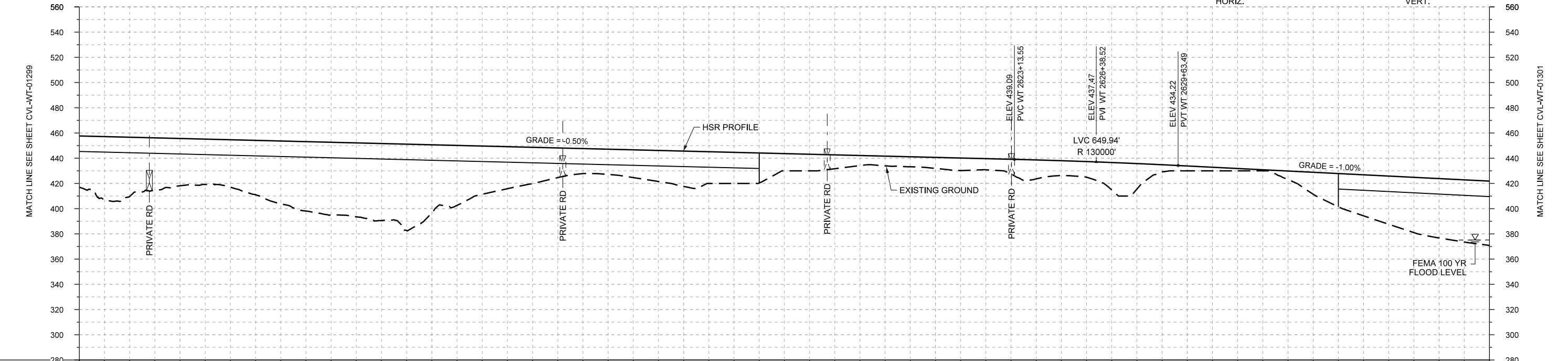
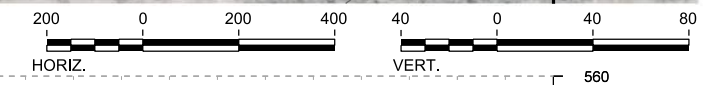
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 2530+00 TO WT 2586+00

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	Drawing No	Rev	
234180	CVL-WT-01299	01	



PLAN



PROFILE

STATIONING	WT 2586+00	WT 2590+00	WT 2600+00	WT 2610+00	WT 2620+00	WT 2630+00	WT 2640+00	WT 2642+00
HOR. ALIGNMENT	L=34770							
VER. ALIGNMENT	L=4953.33 G=-0.500%				R=130000		L=2027.17 G=-1.000%	
CUT AND FILL	+41.0	+47.0	+37.5	+37.7	+49.9	+57.4	+61.2	+54.5
TYP. SECTION	VIADUCT (E)			EMBANKMENT (A)			VIADUCT (E)	

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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Tel (214) 217 2200 Fax (214) 217 2201
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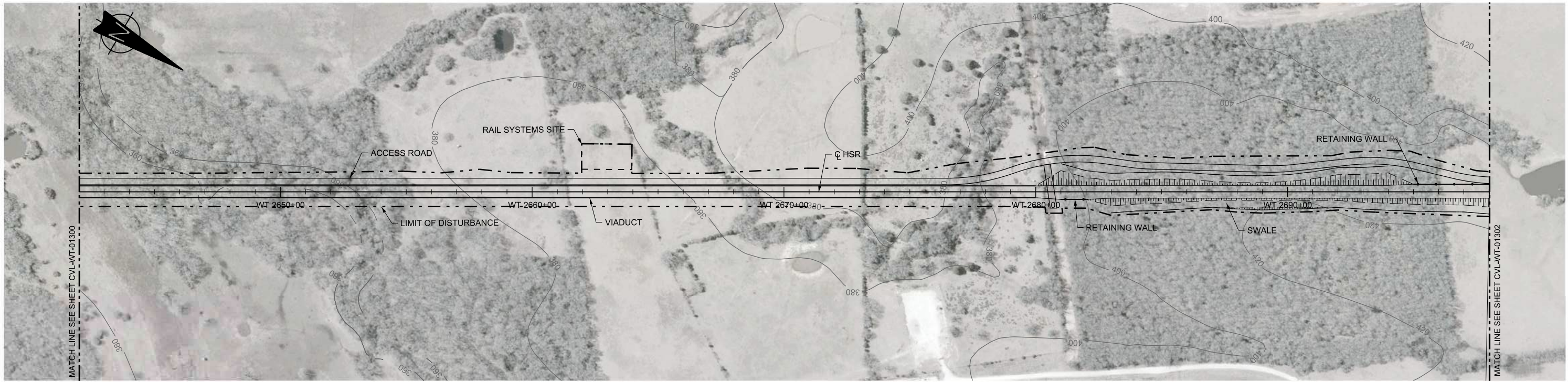
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TEXAS CENTRAL

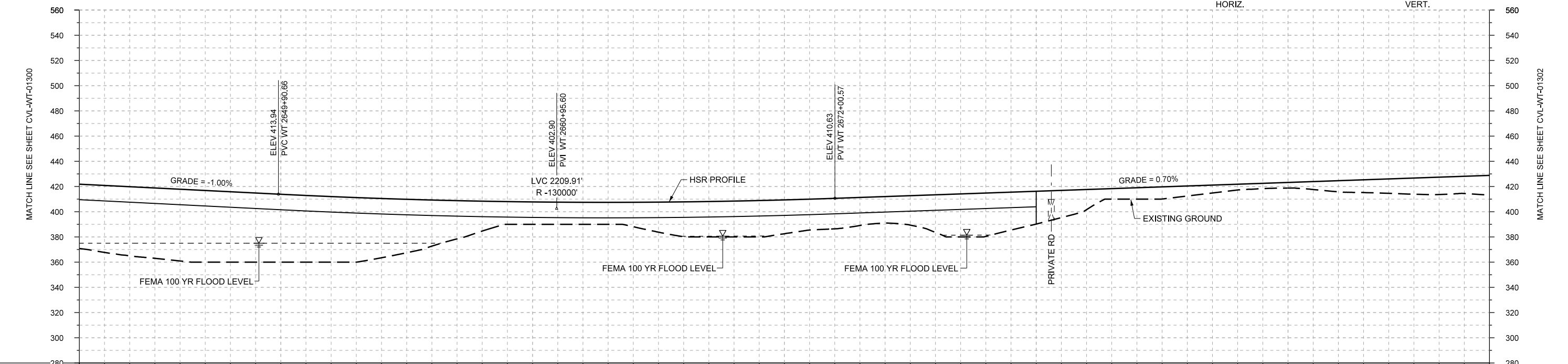
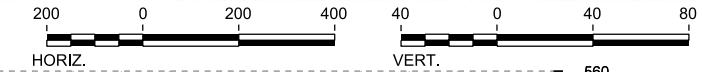
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 2586+00 TO WT 2642+00

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	Drawing No	Rev	
234180	CVL-WT-01300	01	



PLAN



PROFILE

STATIONING	WT 2642+00	WT 2650+00	WT 2660+00	WT 2670+00	WT 2680+00	WT 2690+00	WT 2698+00																						
HOR. ALIGNMENT	L=34770																												
VER. ALIGNMENT	L=2027.17 G=-1.000%		R=130000			L=5398.66 G=0.700%																							
CUT AND FILL	+51.1	+55.0	+57.0	+55.9	+53.9	+52.0	+47.0	+36.6	+23.7	+17.8	+17.5	+19.4	+27.7	+28.4	+26.9	+24.2	+21.0	+29.7	+34.4	+28.0	+16.0	+9.0	+7.9	+4.5	+4.4	+8.8	+11.4	+13.8	+15.6
TYP. SECTION	VIADUCT (E)										EMBANKMENT (A)																		

REV	DATE	BY	CHK	APP	DESCRIPTION

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

ARUP
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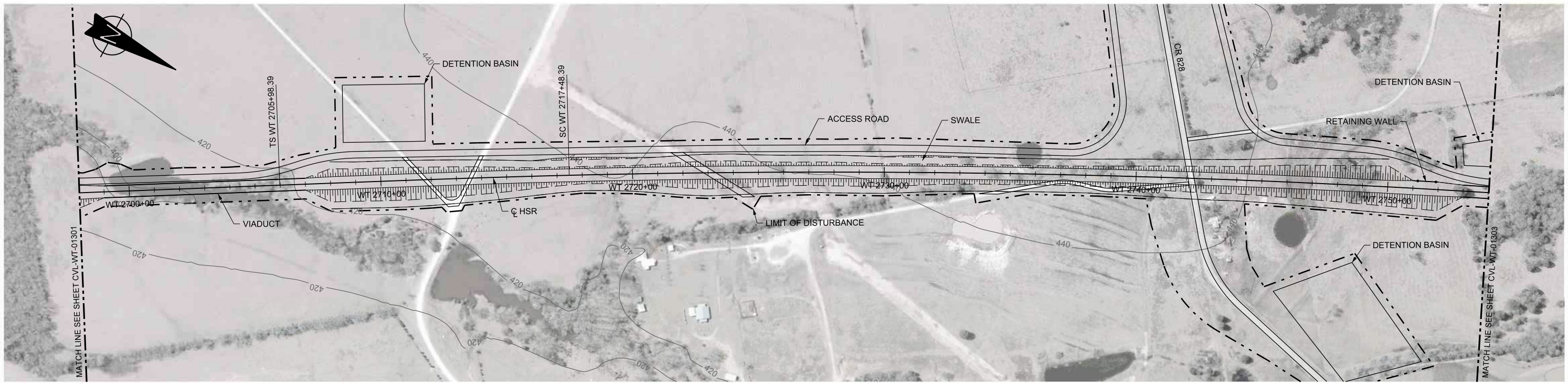
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 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

Client

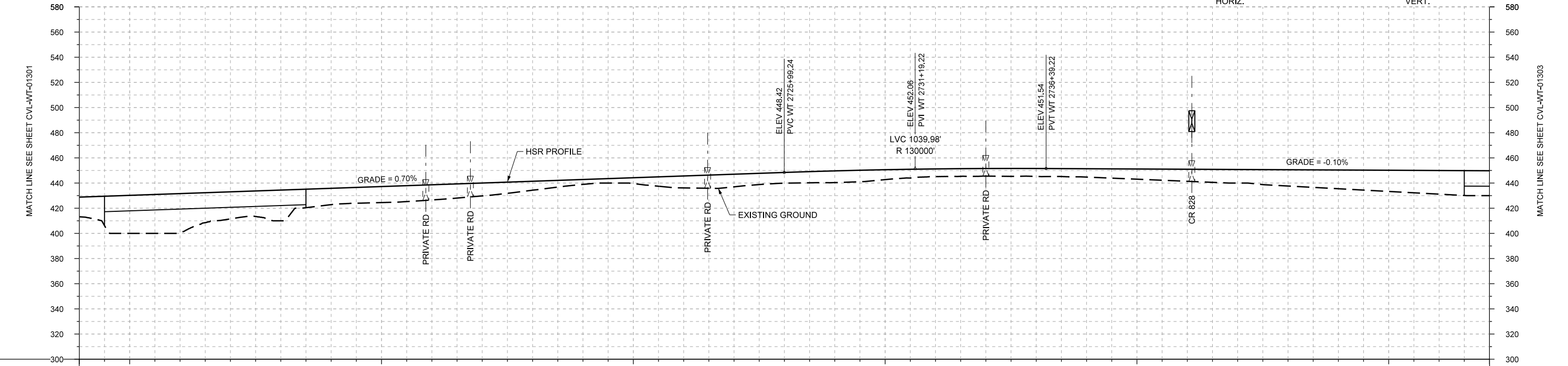
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE
 WT 2642+00 TO WT 2698+00

Scale
 AS SHOWN
 Drawing Status
FINAL DRAFT
 Job No 234180 Drawing No CVL-WT-01301 Rev 01



PLAN



PROFILE

STATIONING	WT 2698+00	WT 2700+00	WT 2710+00	WT 2720+00	WT 2730+00	WT 2740+00	WT 2750+00	WT 2754+00																					
HOR. ALIGNMENT	L=34770		L=1150		R=42000 L=19611		L=3635.54 G=-0.100%																						
VER. ALIGNMENT	L=5398.66 G=0.700%		R=130000		L=3635.54 G=-0.100%																								
CUT AND FILL	+15.6	+30.2	+30.9	+21.5	+24.4	+12.9	+12.7	+12.0	+10.2	+7.0	+3.9	+4.8	+9.5	+10.0	+8.5	+9.3	+7.9	+6.1	+6.1	+6.3	+6.7	+8.1	+9.6	+10.8	+13.0	+14.9	+13.9	+13.8	+13.8
TYP. SECTION	(A)		VIADUCT (E)		EMBANKMENT (A)												(E)												

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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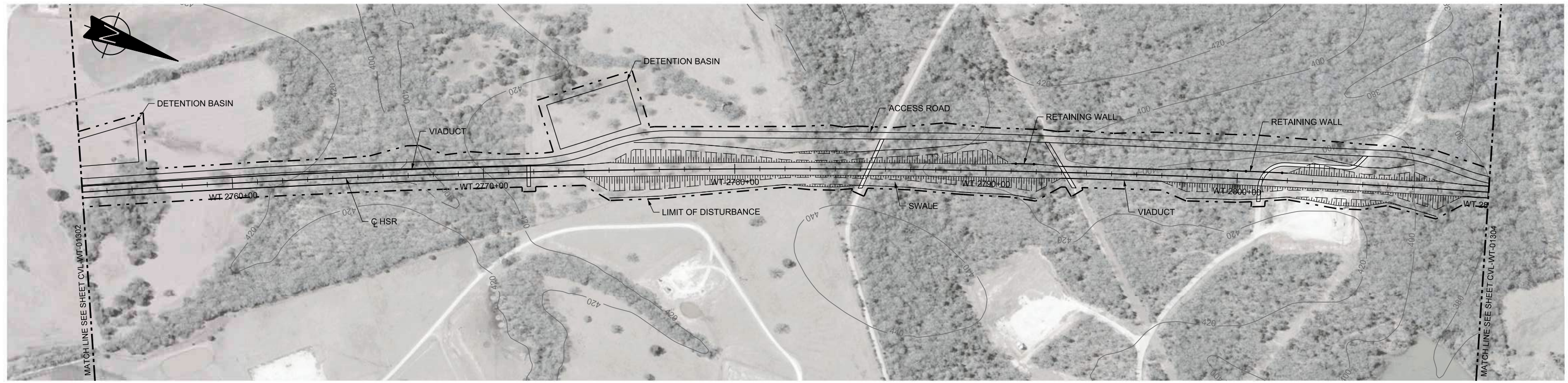
Client

TEXAS CENTRAL

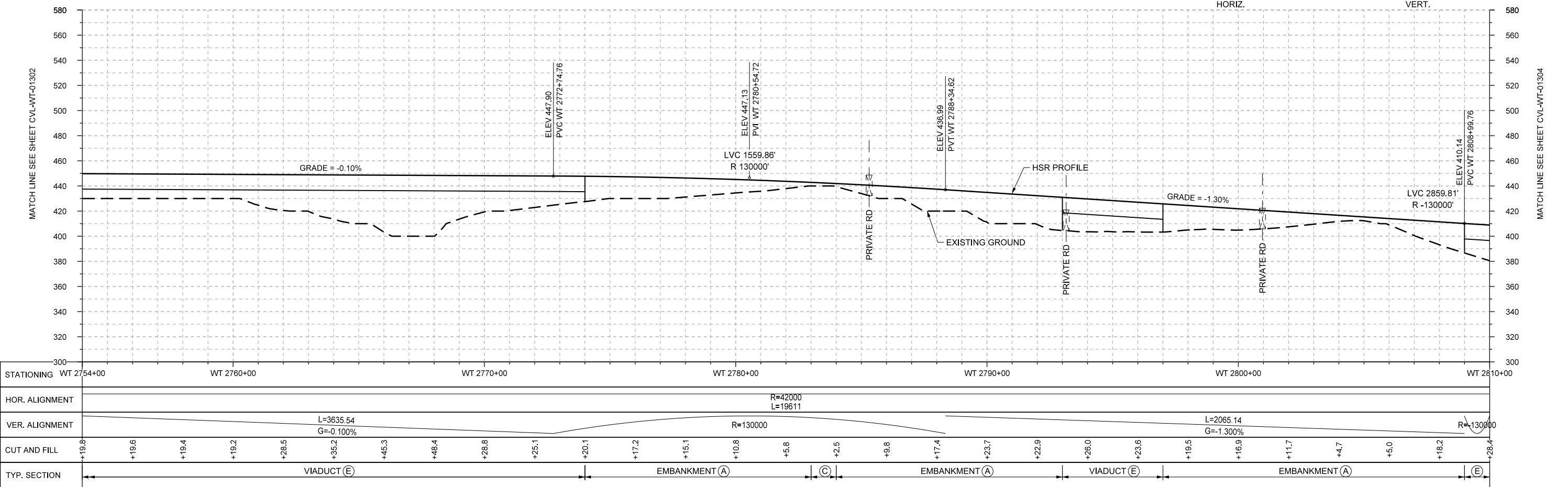
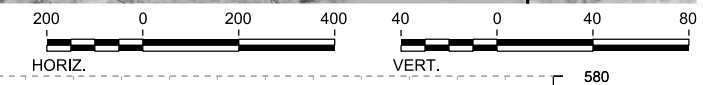
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 2698+00 TO WT 2754+00

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	Drawing No	Rev	
234180	CVL-WT-01302	01	



PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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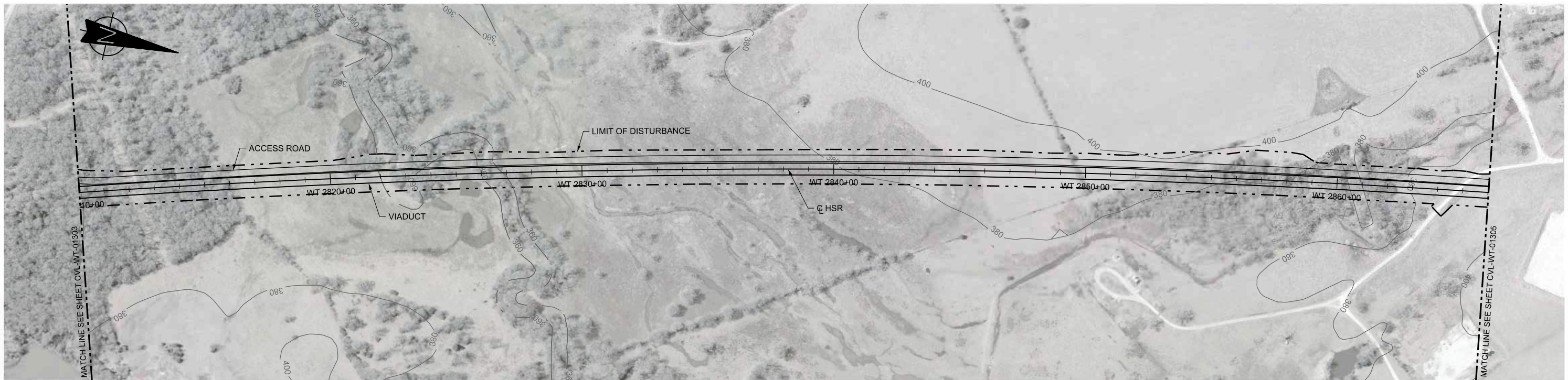
Client

TEXAS CENTRAL

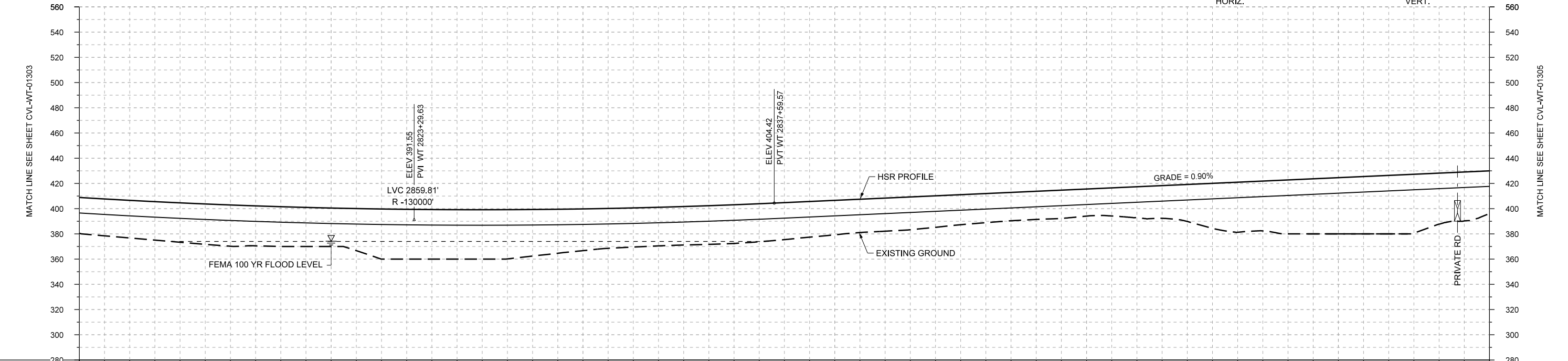
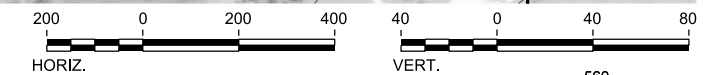
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 2754+00 TO WT 2810+00

Scale AS SHOWN		
Drawing Status FINAL DRAFT		
Job No 234180	Drawing No CVL-WT-01303	Rev 01



PLAN



PROFILE

STATIONING	WT 2810+00	WT 2820+00	WT 2830+00	WT 2840+00	WT 2850+00	WT 2860+00	WT 2866+00																						
HOR. ALIGNMENT				R=42000 L=19611																									
VER. ALIGNMENT	R=-130000			L=3069.82 G=0.900%																									
CUT AND FILL	+28.4	+29.8	+31.2	+32.7	+31.6	+30.5	+39.7	+39.3	+39.2	+38.9	+33.1	+31.0	+30.5	+30.7	+29.4	+27.4	+26.3	+25.0	+23.1	+22.3	+21.5	+24.7	+29.4	+39.7	+42.8	+44.6	+46.4	+40.4	+33.9
TYP. SECTION	VIADUCT (E)																												

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

ARUP

Arup Texas, Inc.
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2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
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Texas Registered Engineering Firm: F-2144

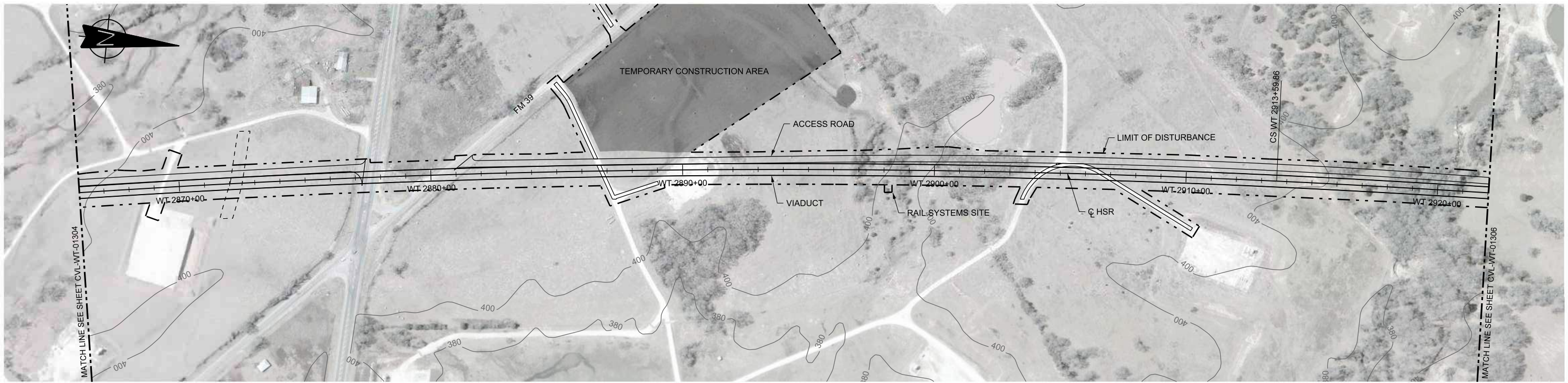
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TEXAS CENTRAL

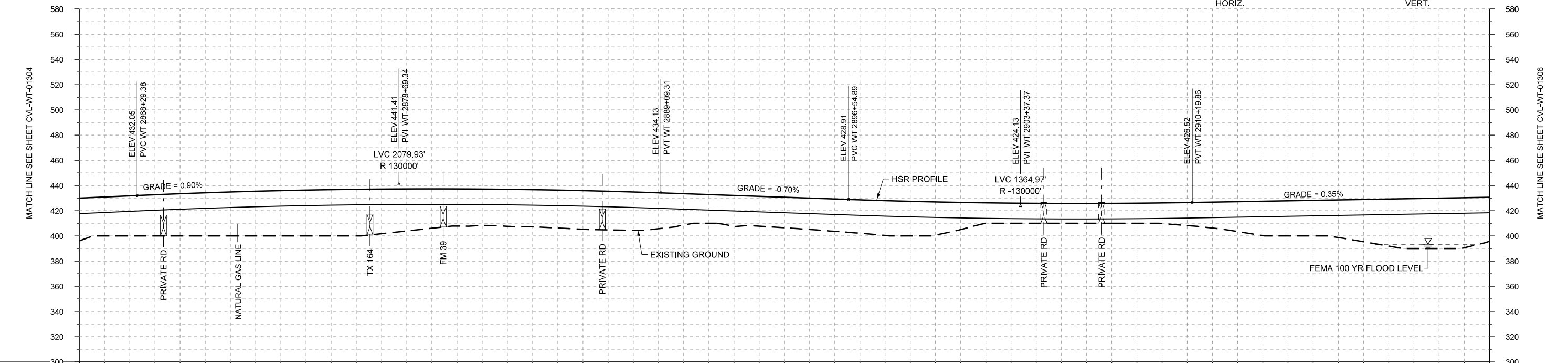
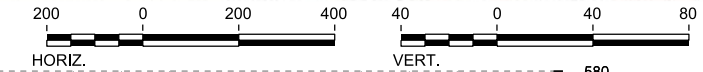
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 2810+00 TO WT 2866+00

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	Drawing No	Rev	
234180	CVL-WT-01304	01	



PLAN



PROFILE

STATIONING	WT 2866+00	WT 2870+00	WT 2880+00	WT 2890+00	WT 2900+00	WT 2910+00	WT 2920+00	WT 2922+00																					
HOR. ALIGNMENT					R=42000 L=19611																								
VER. ALIGNMENT	L=3069.82 G=0.900%		R=130000		L=745.57 G=-0.700%		R=130000																						
CUT AND FILL	+33.9	+31.8	+33.5	+34.9	+35.9	+36.7	+35.4	+31.2	+28.9	+29.5	+30.6	+30.4	+24.8	+24.6	+24.2	+25.7	+27.7	+26.4	+16.2	+15.8	+15.7	+15.9	+15.3	+23.7	+27.9	+29.9	+37.4	+40.0	+35.0
TYP. SECTION	VIADUCT (E)																												

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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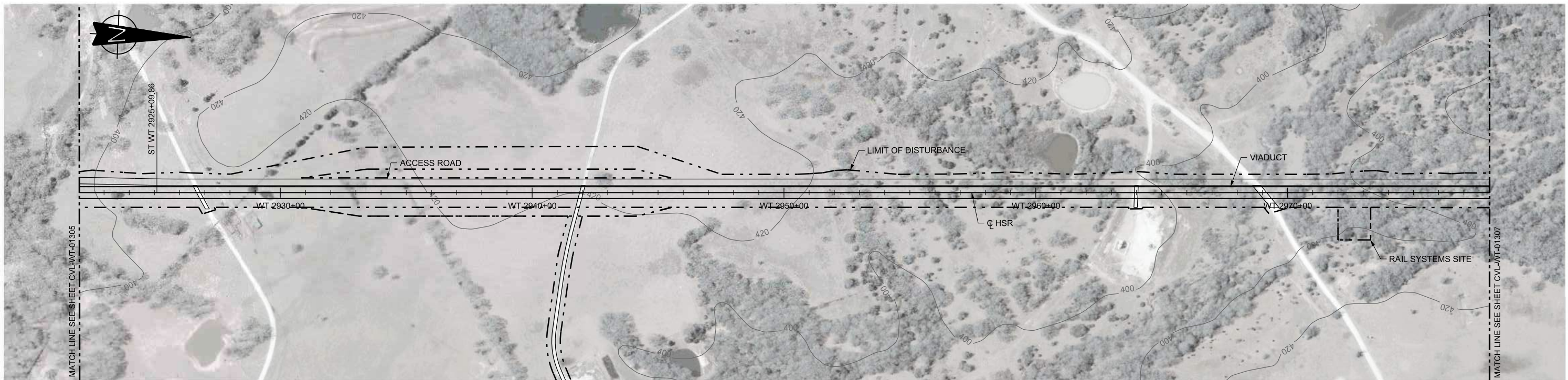
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
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Client

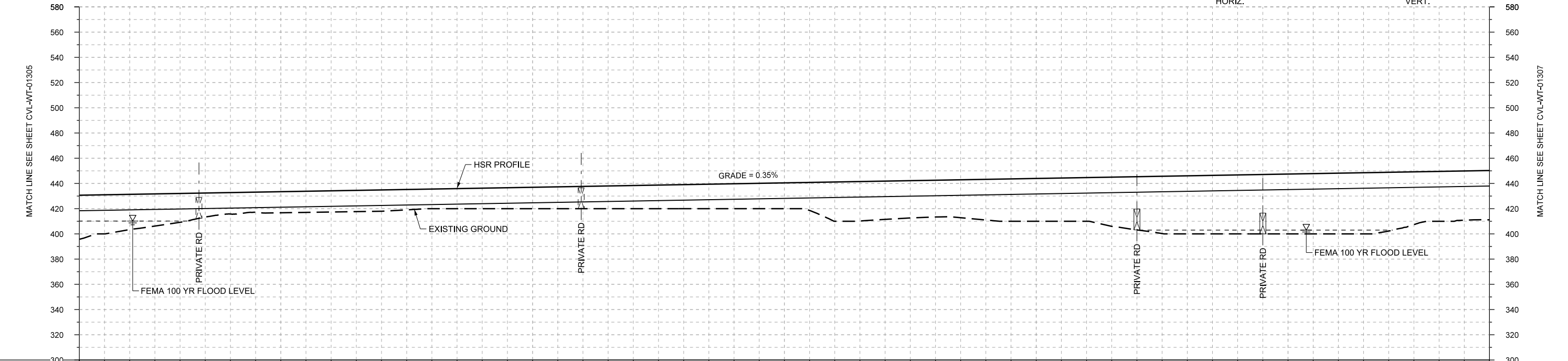
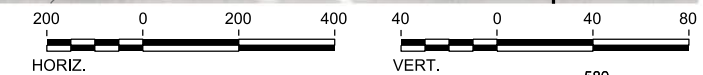
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 2866+00 TO WT 2922+00

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	Drawing No	Rev	
234180	CVL-WT-01305	01	



PLAN



PROFILE

STATIONING	WT 2922+00	WT 2930+00	WT 2940+00	WT 2950+00	WT 2960+00	WT 2970+00	WT 2978+00																						
HOR. ALIGNMENT	L=1150			L=9927																									
VER. ALIGNMENT	L=10175.02 G=0.350%																												
CUT AND FILL	+35.6	+28.0	+22.9	+17.0	+16.8	+16.8	+16.9	+15.6	+16.3	+17.0	+17.7	+18.4	+19.1	+19.8	+20.5	+31.2	+30.4	+29.2	+32.3	+34.0	+34.7	+42.3	+46.1	+46.8	+47.5	+46.2	+46.6	+39.6	+39.2
TYP. SECTION	VIADUCT (E)																												

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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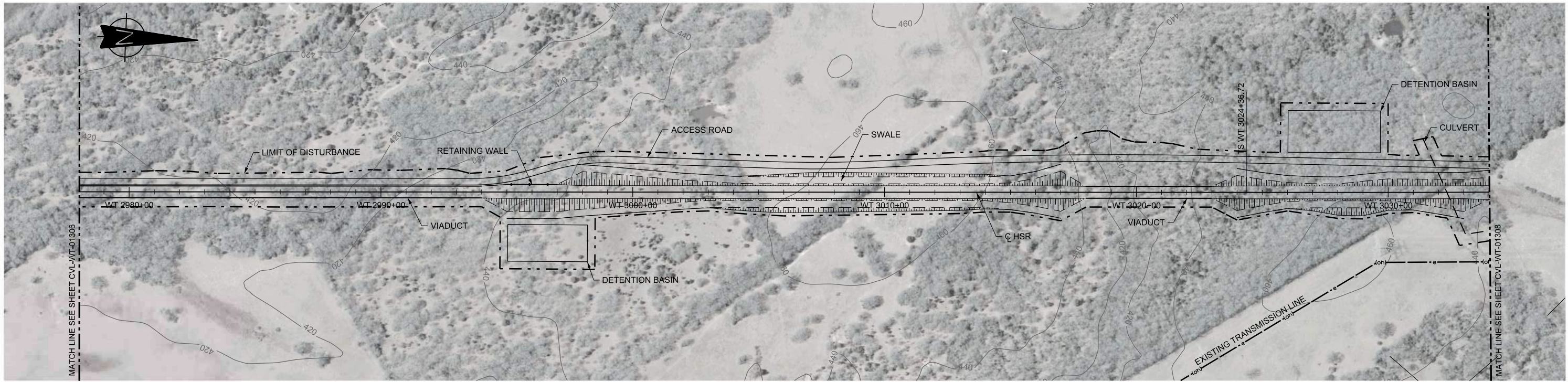
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 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

Client

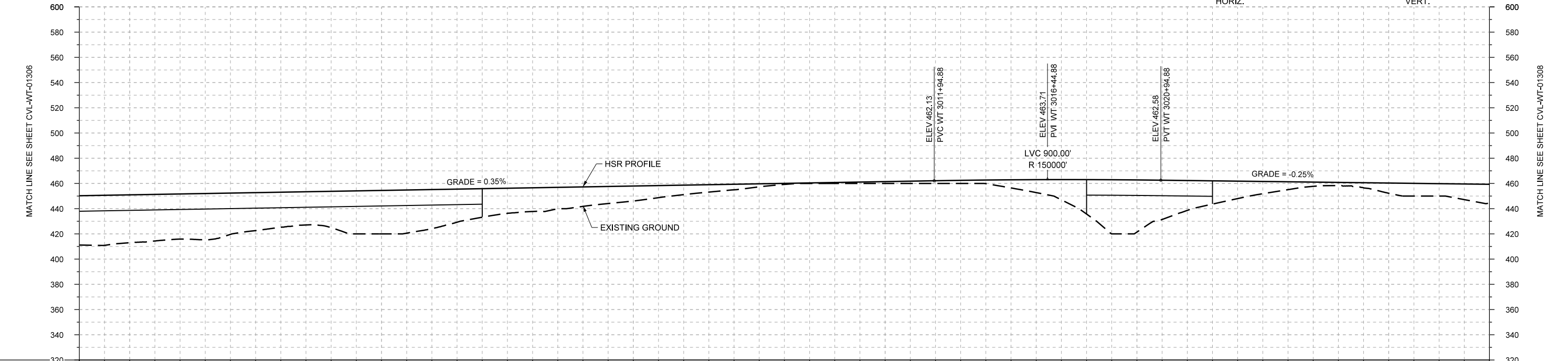
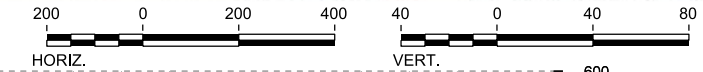
TEXAS CENTRAL
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 2922+00 TO WT 2978+00

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	234180	Drawing No	CVL-WT-01306
Rev			01



PLAN



PROFILE

STATIONING	WT 2978+00	WT 2980+00	WT 2990+00	WT 3000+00	WT 3010+00	WT 3020+00	WT 3030+00	WT 3034+00																					
HOR. ALIGNMENT	L=9927				L=1800																								
VER. ALIGNMENT	L=10175.02 G=0.350%				R=150000		L=3543.37 G=-0.250%																						
CUT AND FILL	+39.2	+36.0	+35.8	+32.8	+27.8	+28.9	+34.5	+31.0	+22.7	+18.8	+15.5	+11.9	+7.6	+4.4	+0.9	+0.8	+1.5	+2.2	+2.9	+10.3	+27.3	+41.4	+23.7	+13.8	+6.2	+2.5	+8.1	+9.8	+14.9
TYP. SECTION	VIADUCT (E)				EMBANKMENT (A)				CUT (C)				EMBANKMENT (A)		VIADUCT (E)		EMBANKMENT (A)		(C)		EMBANKMENT (F)								

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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Client

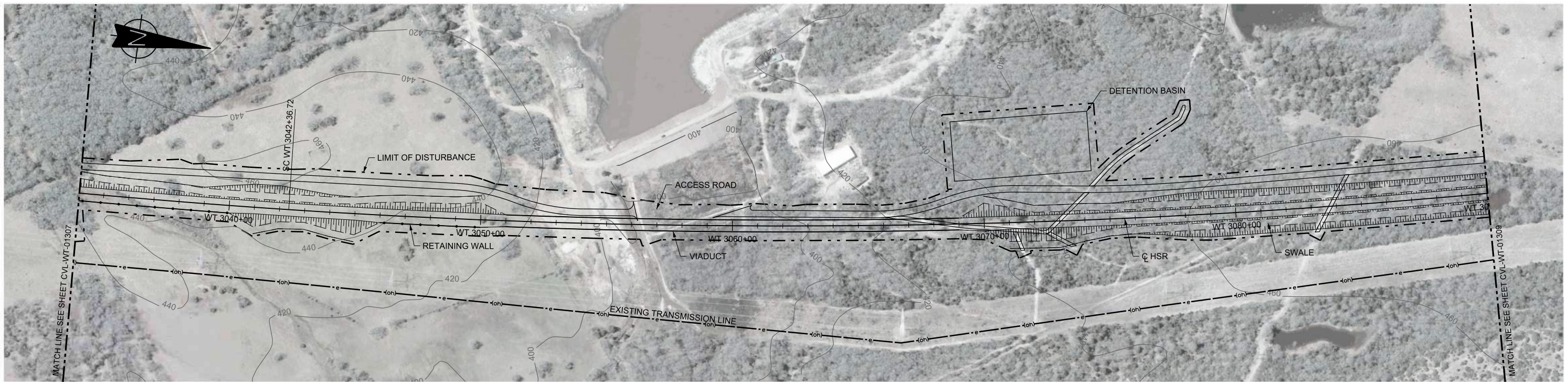
TEXAS CENTRAL

1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

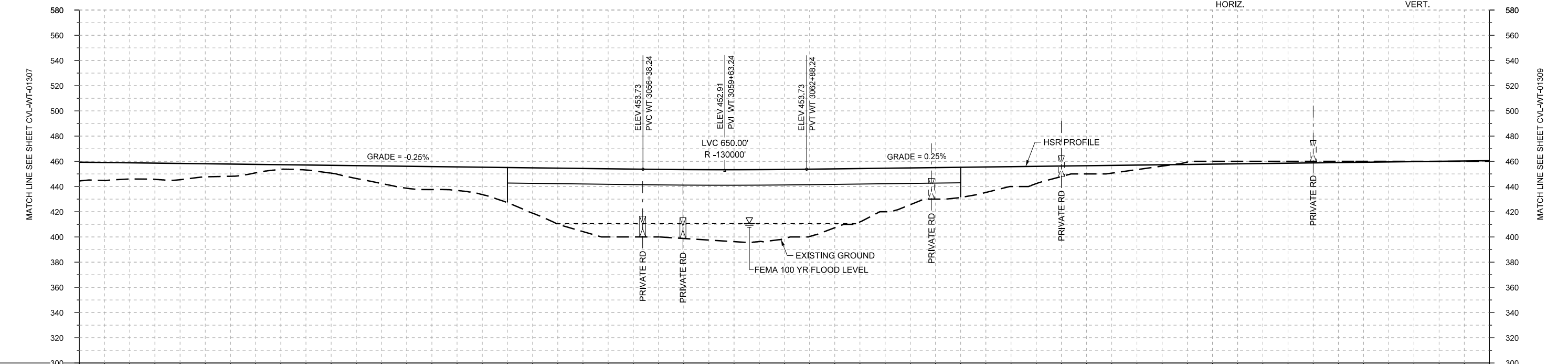
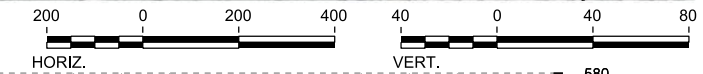
Drawing Title

**WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 2978+00 TO WT 3034+00**

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	Drawing No	Rev	
234180	CVL-WT-01307	01	



PLAN



PROFILE

STATIONING	WT 3034+00	WT 3040+00	WT 3050+00	WT 3060+00	WT 3070+00	WT 3080+00	WT 3090+00																					
HOR. ALIGNMENT	L=1800		R=-30000 L=5653			L=6188.86 G=0.250%																						
VER. ALIGNMENT	L=3543.37 G=-0.250%		R=-130000			L=6188.86 G=0.250%																						
CUT AND FILL	+14.9	+12.8	+12.9	+9.7	+3.7	+6.2	+13.9	+18.2	+21.7	+38.0	+50.1	+53.8	+54.6	+57.0	+54.8	+46.7	+34.5	+25.0	+20.2	+13.7	+6.5	+3.6	-1.9	-2.0	-1.5	-1.0	-0.5	+0.4
TYP. SECTION	EMBANKMENT (F)		CUT (H)	EMBANKMENT (F)		VIADUCT (K)			EMBANKMENT (F)			CUT (H)																

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017



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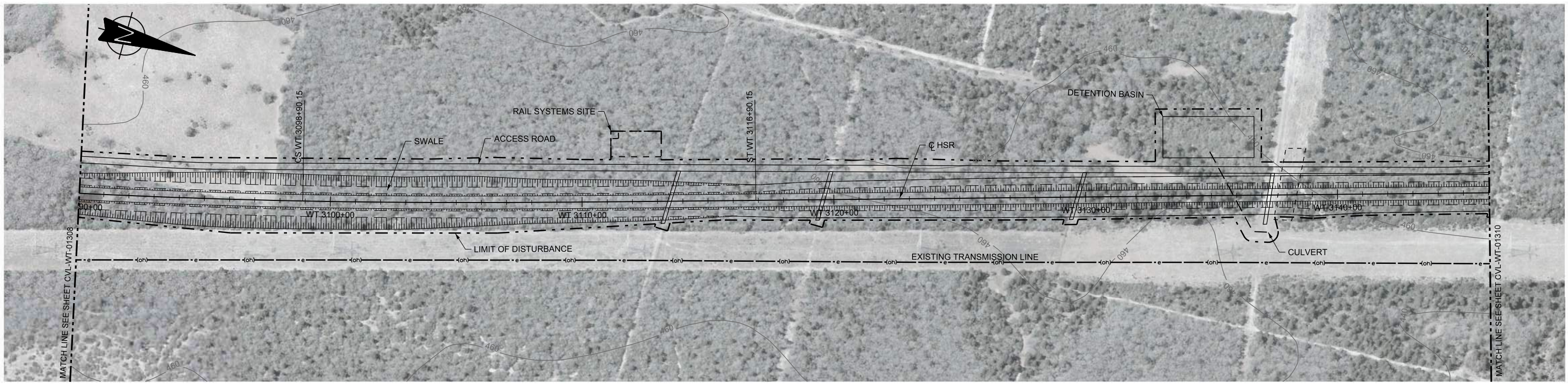
2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
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Texas Registered Engineering Firm: F-2144



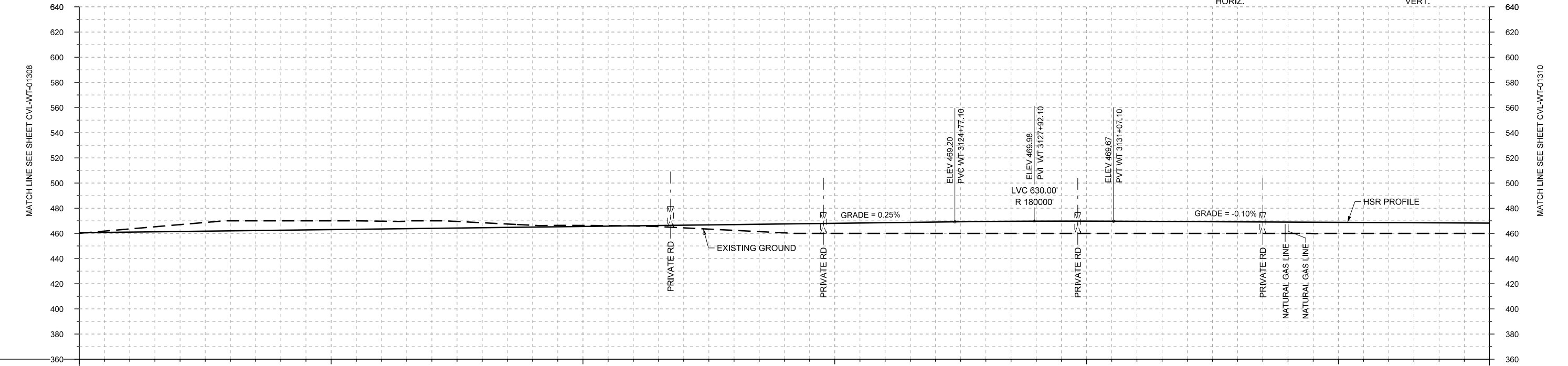
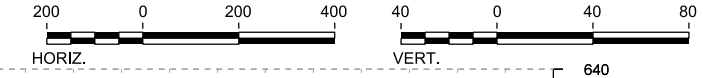
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1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 3034+00 TO WT 3090+00

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01308
Rev	01



PLAN



PROFILE

STATIONING	WT 3090+00	WT 3100+00	WT 3110+00	WT 3120+00	WT 3130+00	WT 3140+00	WT 3146+00																						
HOR. ALIGNMENT	R=30000 L=5653		L=1800		L=3646																								
VER. ALIGNMENT	L=6188.86 G=0.250%		R=180000			L=4369.12 G=-0.100%																							
CUT AND FILL	+0.4	-2.5	-5.5	-8.0	-7.5	-7.0	-6.2	-6.0	-4.0	-1.4	-0.8	+0.1	+2.1	+4.6	+7.1	+8.0	+8.5	+9.0	+9.5	+9.7	+9.7	+9.6	+9.4	+9.2	+9.0	+8.8	+8.6	+8.4	+8.2
TYP. SECTION	CUT (H)												EMBANKMENT (F)																

REV	DATE	BY	CHK	APP	DESCRIPTION

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

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 Texas Registered Engineering Firm: F-1990

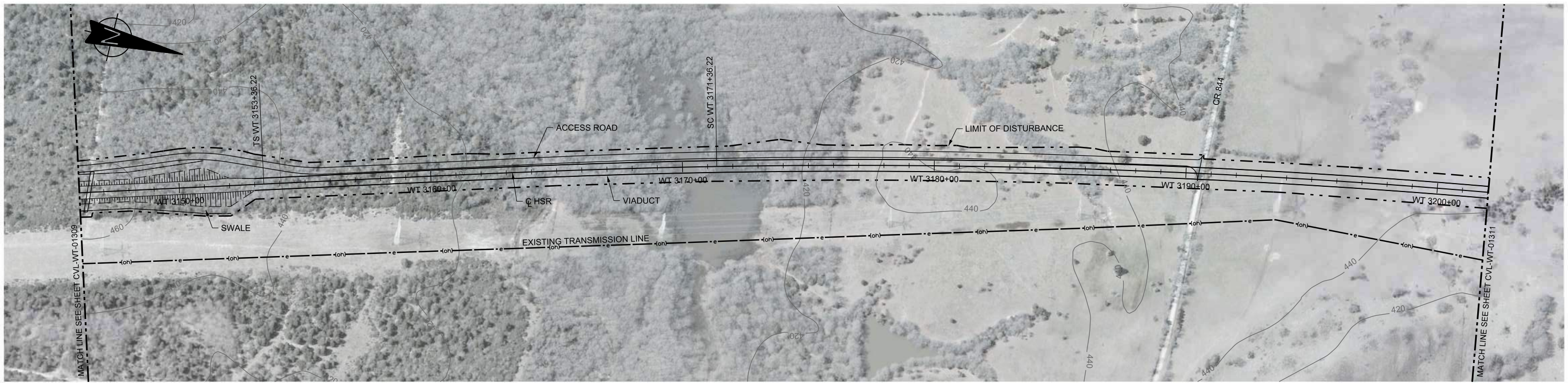
FRESE AND NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

Client

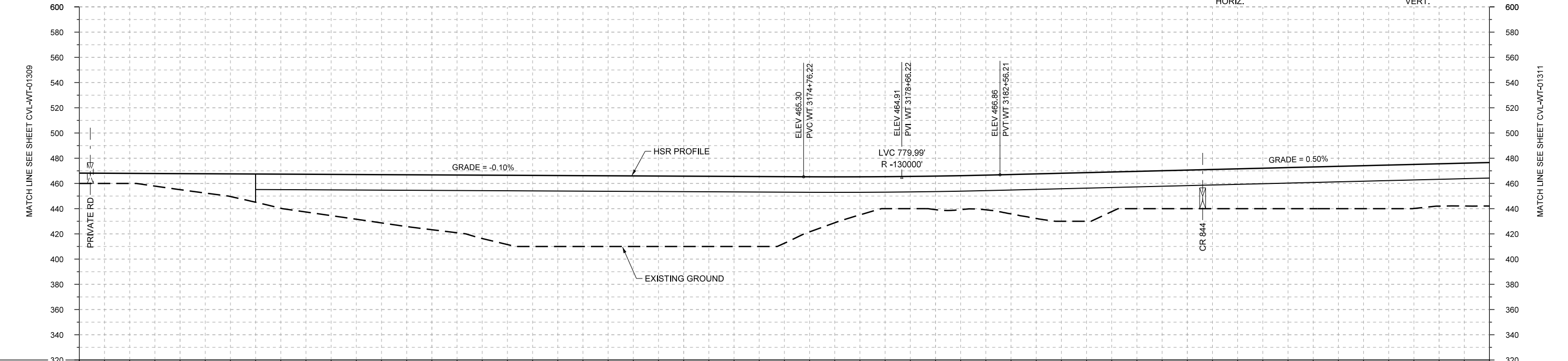
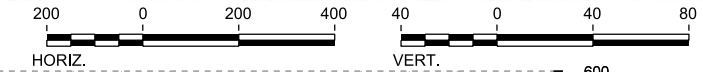
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 3090+00 TO WT 3146+00

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01309
Rev	01



PLAN



PROFILE

STATIONING	WT 3146+00	WT 3150+00	WT 3160+00	WT 3170+00	WT 3180+00	WT 3190+00	WT 3200+00	WT 3202+00																					
HOR. ALIGNMENT	L=3646		L=1800		R=30000 L=6129																								
VER. ALIGNMENT	L=4369.12 G=-0.100%		R=-130000			L=3303.67 G=0.500%																							
CUT AND FILL	+8.2	+8.0	+12.7	+18.0	+21.1	+32.7	+38.3	+43.5	+50.3	+56.4	+56.2	+56.0	+55.8	+55.6	+52.8	+36.4	+25.4	+26.6	+27.5	+35.4	+36.6	+29.6	+30.6	+31.6	+32.6	+33.6	+34.6	+33.6	+34.5
TYP. SECTION	EMBANKMENT (F)										VIADUCT (K)																		

REV	DATE	BY	CHK	APP	DESCRIPTION

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

ARUP
 Arup Texas, Inc.
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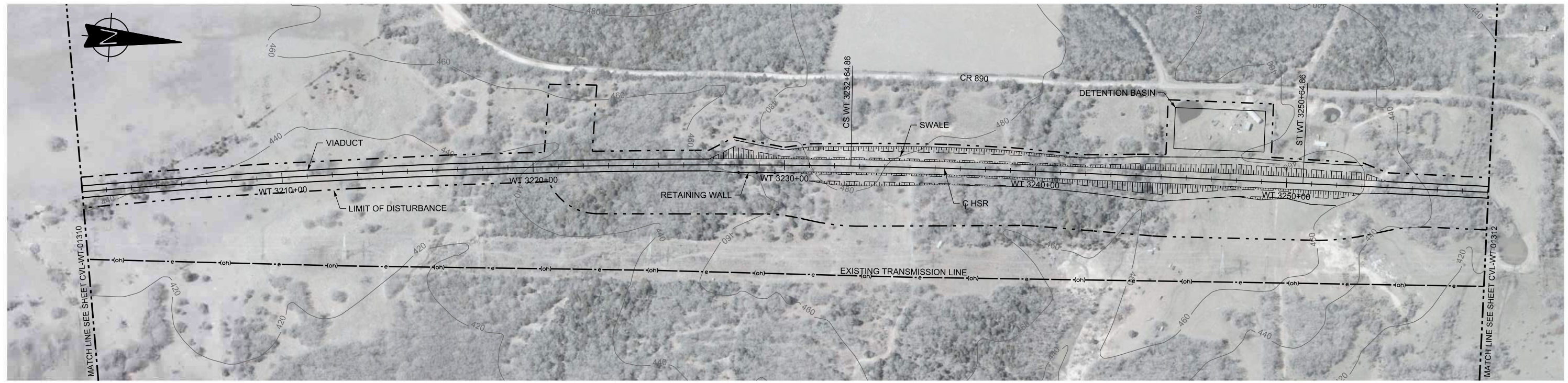
FREESSE AND NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

Client

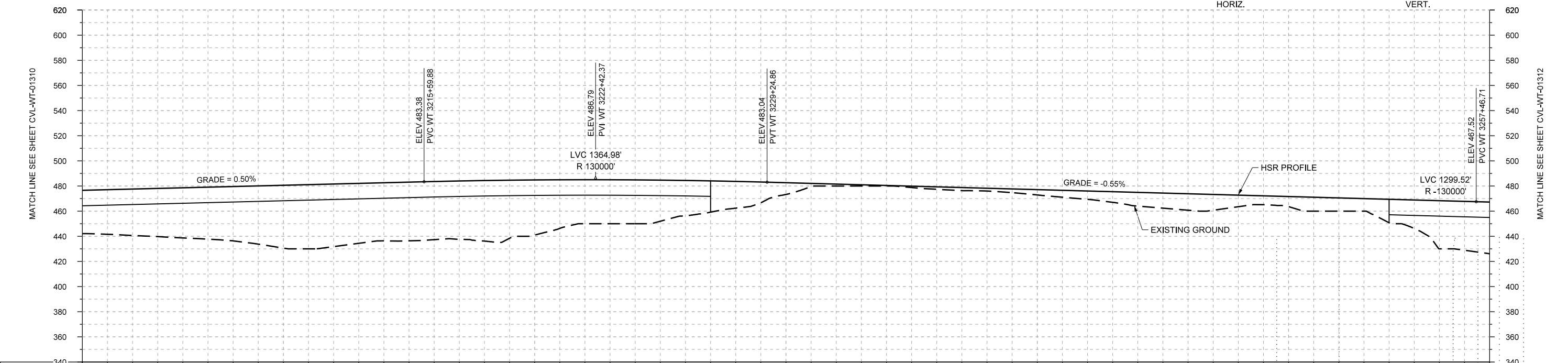
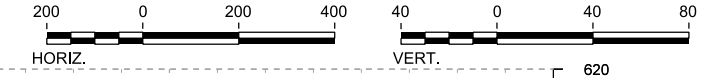
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE
 WT 3146+00 TO WT 3202+00

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01310
Rev	01



PLAN



STATIONING	WT 3202+00	WT 3210+00	WT 3220+00	WT 3230+00	WT 3240+00	WT 3250+00	WT 3258+00
HOR. ALIGNMENT	R=30000 L=6129		L=1800			L=2545	
VER. ALIGNMENT	L=3303.67 G=0.500%		R=130000			L=2821.84 G=-0.550%	
CUT AND FILL	+34.5	+37.0	+39.9	+43.3	+50.0	+49.8	+46.2
TYP. SECTION	VIADUCT (K)			EMBANKMENT (F)		VIADUCT (K)	

PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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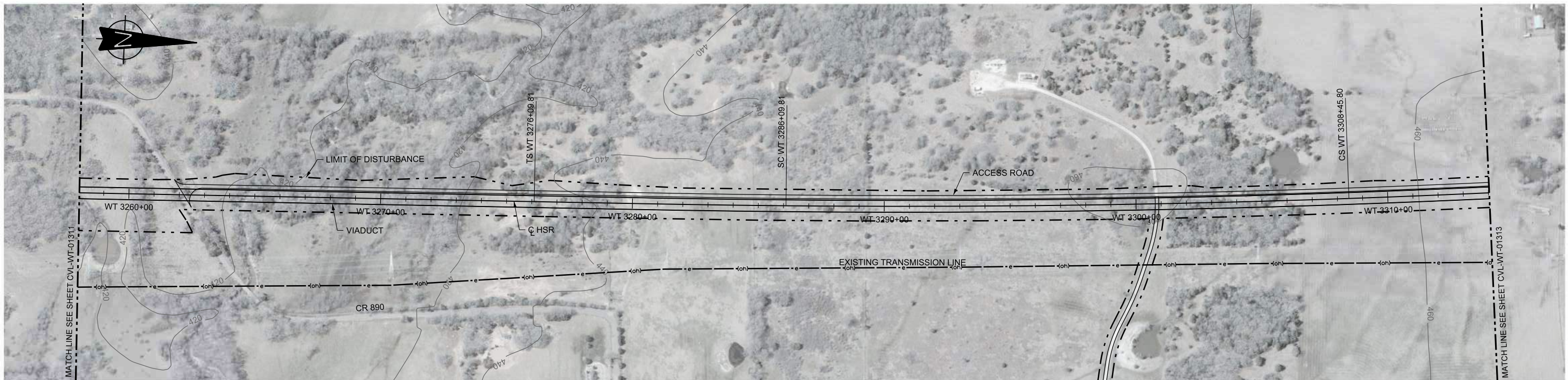
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TEXAS CENTRAL

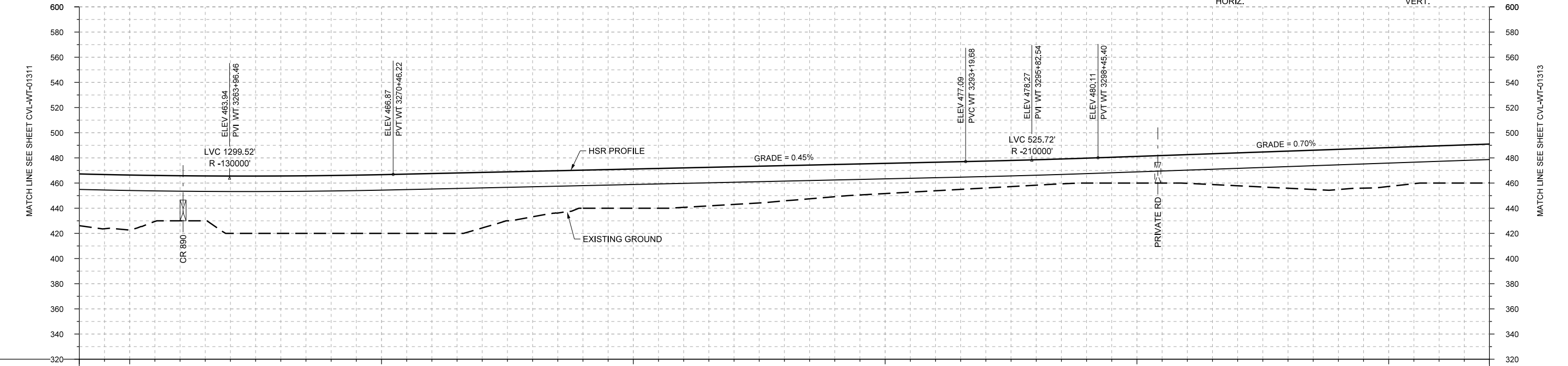
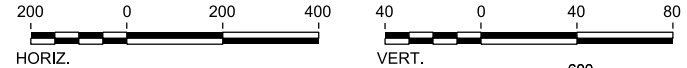
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 3202+00 TO WT 3258+00

Scale AS SHOWN	Drawing Status FINAL DRAFT
Job No 234180	Drawing No CVL-WT-01311
	Rev 01



PLAN



PROFILE

STATIONING	WT 3258+00	WT 3260+00		WT 3270+00		WT 3280+00		WT 3290+00		WT 3300+00		WT 3310+00	WT 3314+00																
HOR. ALIGNMENT	L=2545				L=1000				R=50000 L=2236		L=1000																		
VER. ALIGNMENT	R=130000				L=2273.46 G=0.450%				R=210000		L=2340.40 G=0.700%																		
CUT AND FILL	+41.1	+43.5	+35.8	+45.6	+45.6	+46.0	+46.7	+47.6	+44.2	+38.2	+30.3	+31.2	+31.4	+30.0	+28.0	+25.6	+24.0	+22.6	+21.4	+20.2	+19.8	+21.2	+22.8	+25.2	+29.5	+32.0	+30.9	+29.6	+30.8
TYP. SECTION	VIADUCT (K)																												

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

ARUP
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 10370 Richmond Ave., Suite 475
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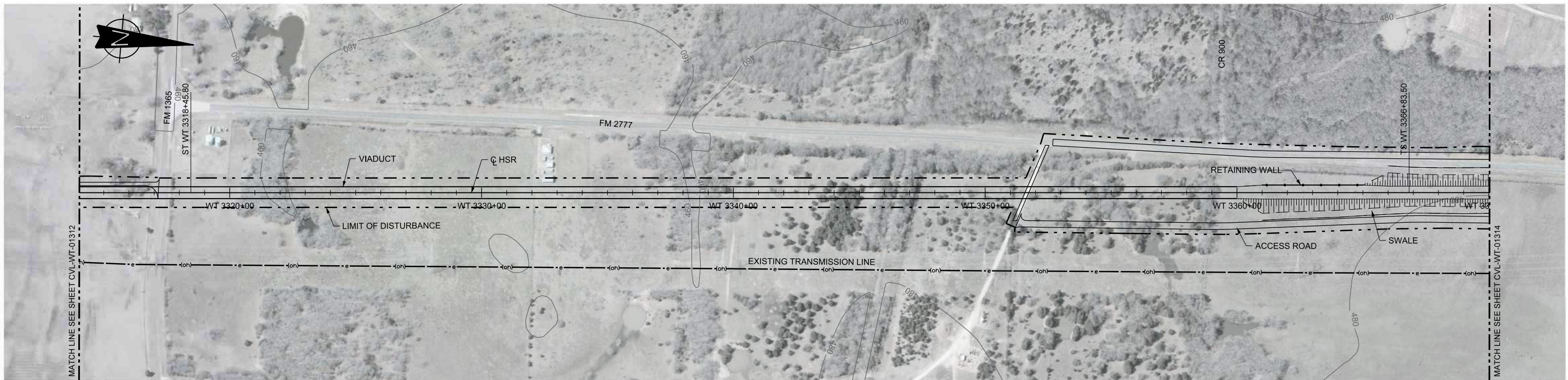
FREESSE AND NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freesse.com
 Texas Registered Engineering Firm: F-2144

Client

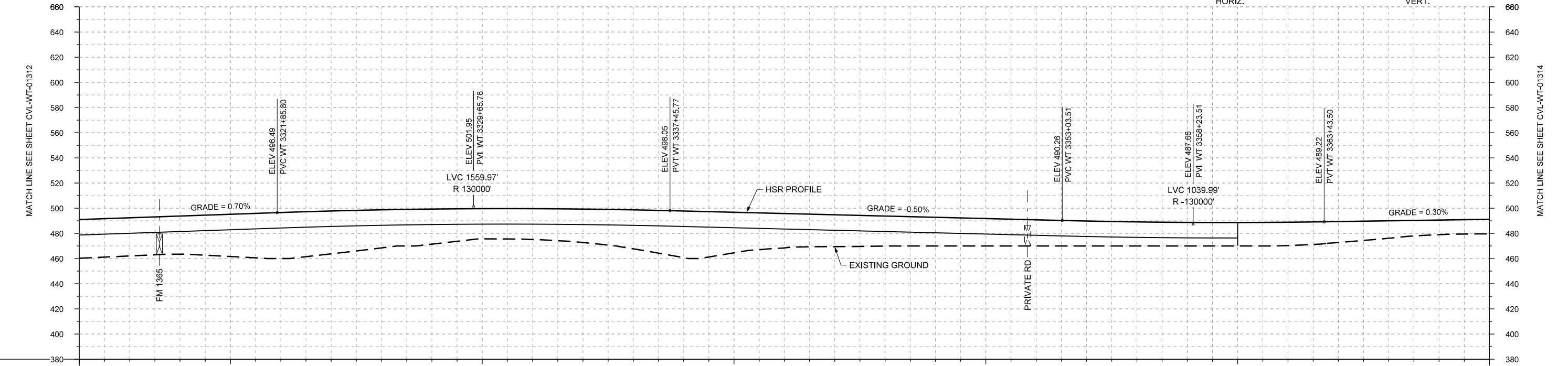
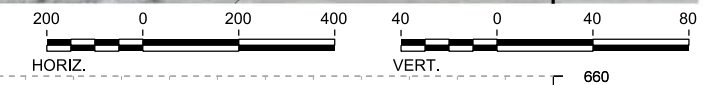
TEXAS CENTRAL
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 3258+00 TO WT 3314+00

Scale AS SHOWN		
Drawing Status FINAL DRAFT		
Job No 234180	Drawing No CVL-WT-01312	Rev 01



PLAN



PROFILE

STATIONING	WT 3314+00	WT 3320+00	WT 3330+00	WT 3340+00	WT 3350+00	WT 3360+00	WT 3370+00	
HOR. ALIGNMENT	L=1000		L=4838			L=700		
VER. ALIGNMENT	L=2340.40 G=0.700%		R=130000			L=1557.74 G=-0.500%		
CUT AND FILL	+30.8	+30.3	+30.3	+33.6	+36.6	+34.1	+30.2	
TYP. SECTION	VIADUCT (K)						EMBANKMENT (F)	

REV	DATE	BY	CHK	APP	DESCRIPTION

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



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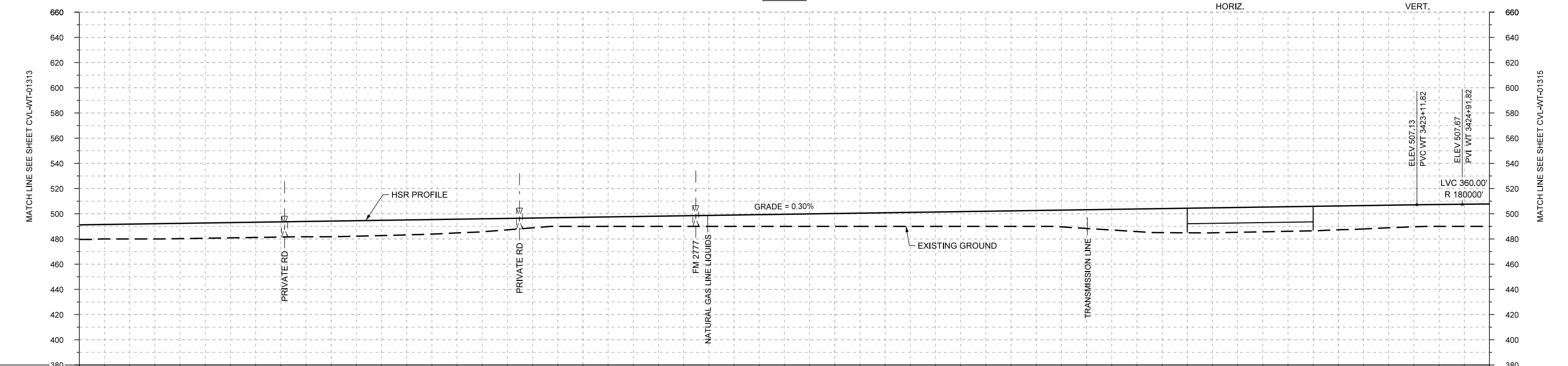
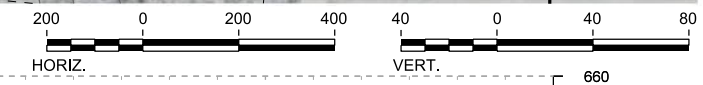
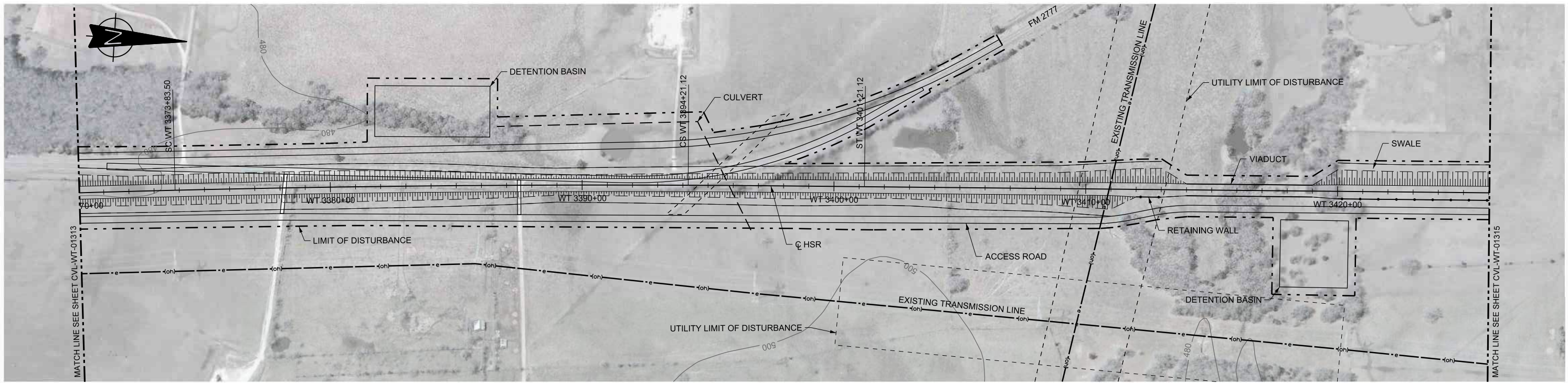
2711 North Haskell Ave., Suite 3300
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Tel (214) 217 2200 Fax (214) 217 2201
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Texas Registered Engineering Firm: F-2144



Client
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 3314+00 TO WT 3370+00

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01313
Rev	01



STATIONING	WT 3370+00	WT 3380+00	WT 3390+00	WT 3400+00	WT 3410+00	WT 3420+00	WT 3426+00																						
HOR. ALIGNMENT	L=700		R=70000 L=2038		L=700	L=9388																							
VER. ALIGNMENT			L=5968.32 G=0.300%		R=180000																								
CUT AND FILL	+11.6	+11.8	+12.1	+12.1	+12.1	+12.5	+12.1	+11.5	+10.3	+7.8	+7.2	+7.8	+8.4	+9.0	+9.6	+10.2	+10.8	+11.4	+12.0	+12.6	+14.9	+17.9	+19.5	+19.7	+19.5	+19.9	+17.9	+17.4	+17.8
TYP. SECTION	EMBANKMENT (F)															VIADUCT (E)			EMBANKMENT (A)										

PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017



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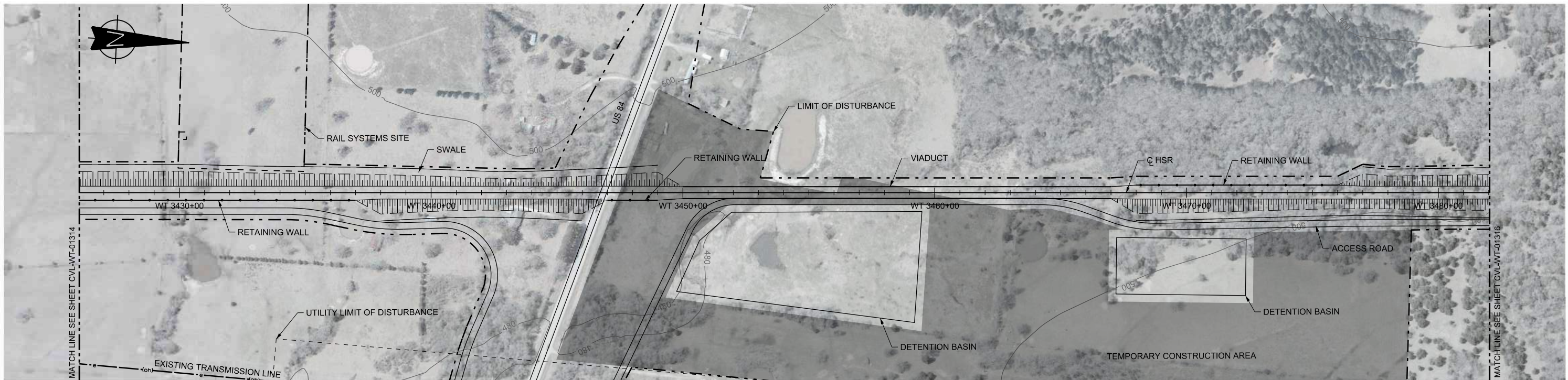
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Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
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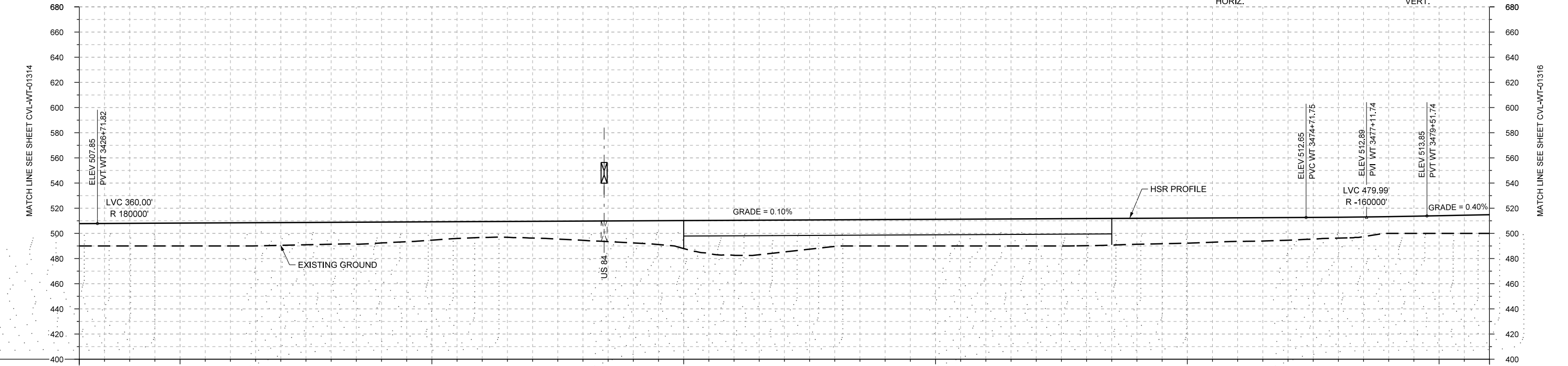
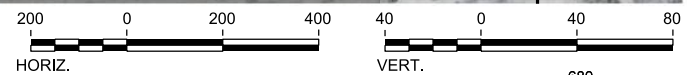
Client
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 3370+00 TO WT 3426+00

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	Drawing No	Rev	
234180	CVL-WT-01314	01	



PLAN



PROFILE

STATIONING	WT 3426+00	WT 3430+00	WT 3440+00	WT 3450+00	WT 3460+00	WT 3470+00	WT 3480+00	WT 3482+00																				
HOR. ALIGNMENT	L=9388																											
VER. ALIGNMENT	R=180000		L=4799.93 G=0.100%			R=-160000		L=4317.45 G=0.400%																				
CUT AND FILL	+17.9	+16.0	+18.2	+18.4	+18.1	+17.4	+16.6	+14.6	+12.6	+13.3	+15.3	+17.6	+22.2	+27.8	+25.3	+21.1	+21.0	+21.2	+21.4	+21.6	+20.7	+20.0	+18.7	+18.0	+16.5	+13.3	+14.0	+14.8
TYP. SECTION	EMBANKMENT (A)										VIADUCT (E)					EMBANKMENT (A)												

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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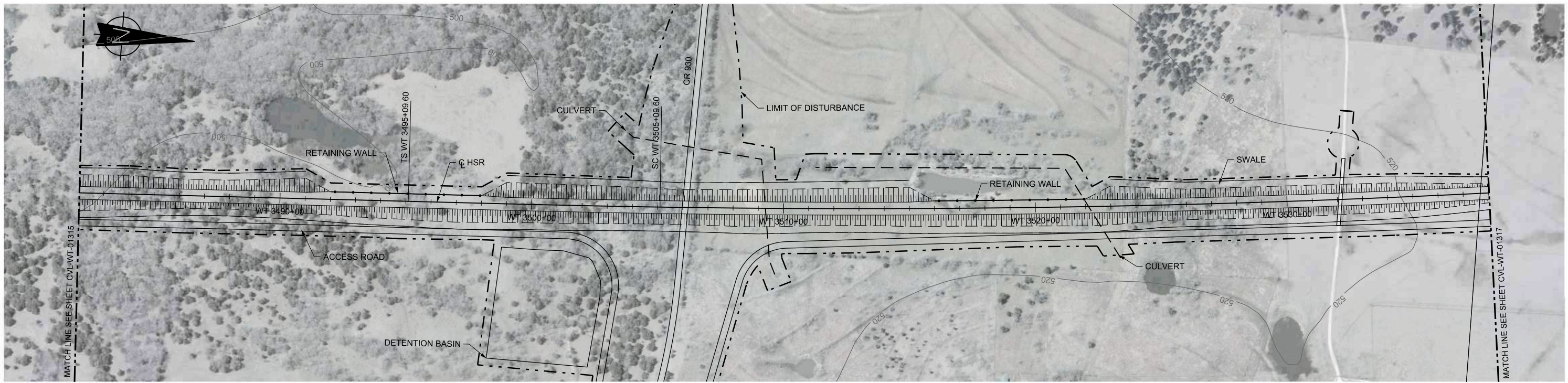
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TEXAS CENTRAL

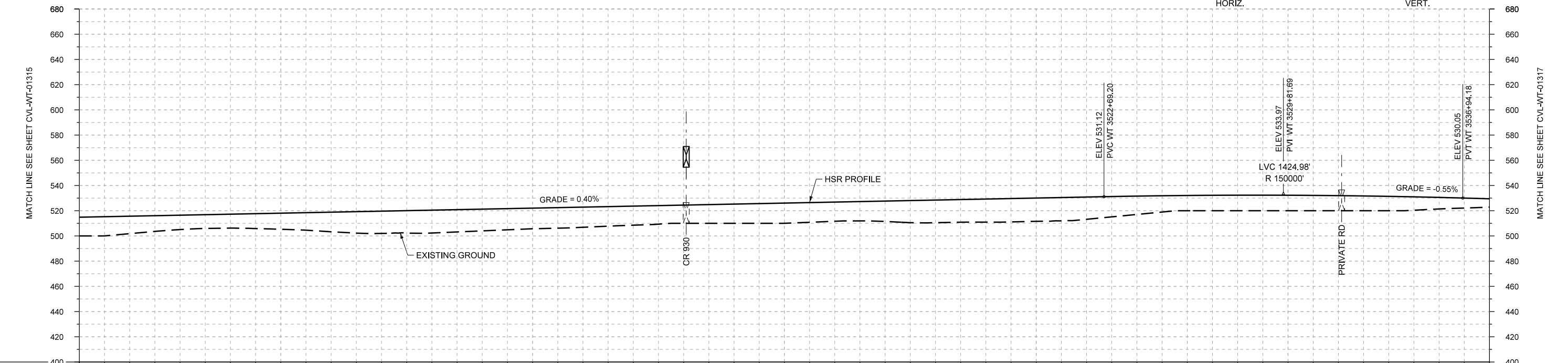
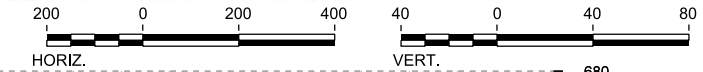
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 3426+00 TO WT 3482+00

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01315
Rev	01



PLAN



PROFILE

STATIONING	WT 3482+00	WT 3490+00	WT 3500+00	WT 3510+00	WT 3520+00	WT 3530+00	WT 3538+00																					
HOR. ALIGNMENT	L=9388		L=1000		R=50000 L=25952																							
VER. ALIGNMENT			L=4317.45 G=0.400%		R=150000		L=16112.24 G=-0.550%																					
CUT AND FILL	+14.8	+13.8	+11.4	+11.0	+12.7	+15.5	+17.6	+18.1	+17.2	+16.3	+15.9	+15.1	+14.4	+15.2	+16.0	+15.2	+16.1	+17.9	+16.3	+18.4	+17.6	+14.6	+12.1	+12.3	+12.3	+12.0	+11.4	+9.1
TYP. SECTION	EMBANKMENT (A)																											

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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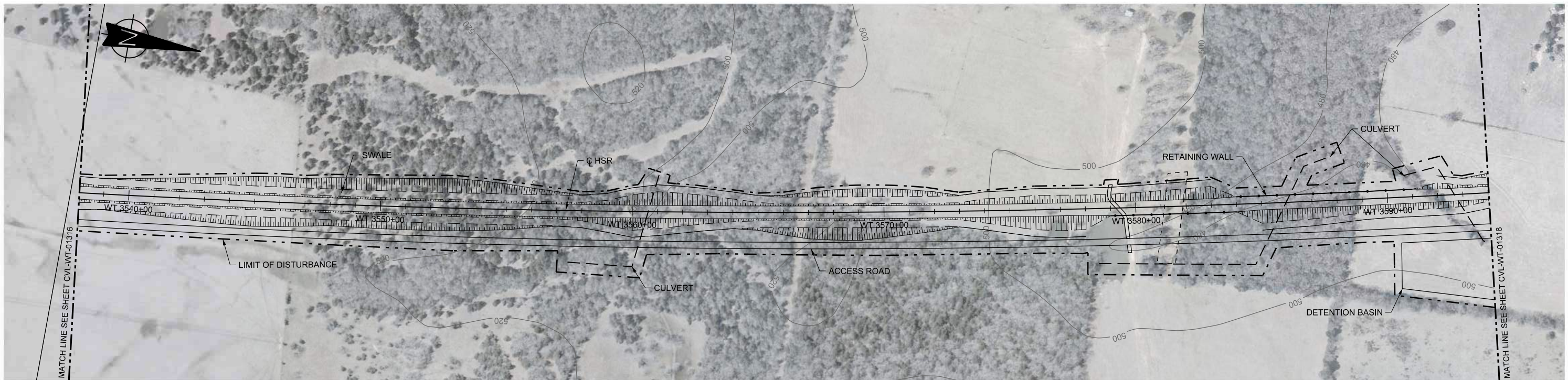
Client

TEXAS CENTRAL

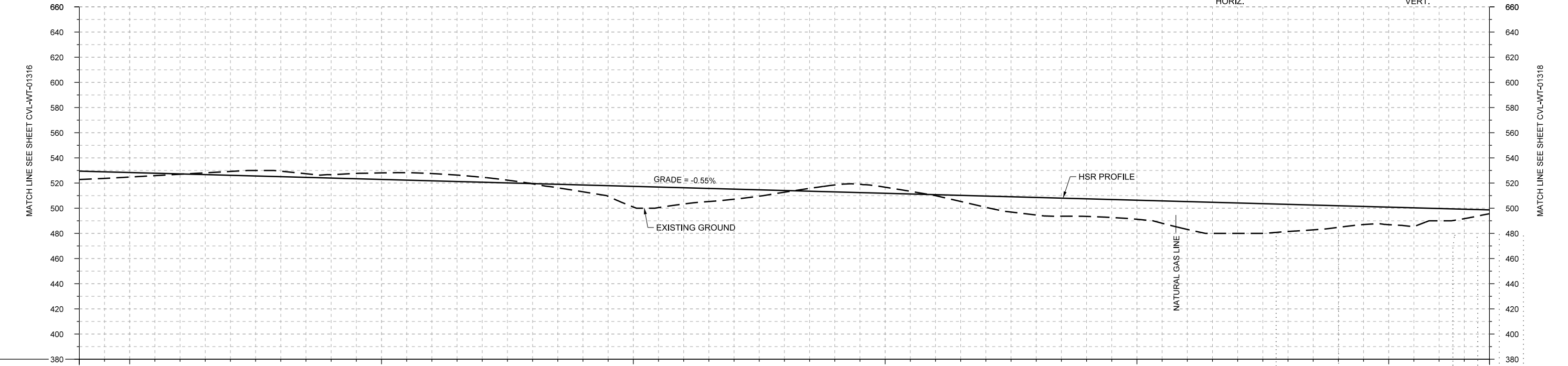
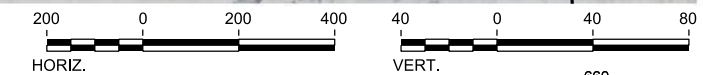
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 3482+00 TO WT 3538+00

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	Drawing No	Rev	
234180	CVL-WT-01316	01	



PLAN



PROFILE

STATIONING	WT 3538+00	WT 3540+00		WT 3550+00		WT 3560+00		WT 3570+00		WT 3580+00		WT 3590+00	WT 3594+00																
HOR. ALIGNMENT	R=50000 L=25952																												
VER. ALIGNMENT	L=16112.24 G=-0.550%																												
CUT AND FILL	+6.7	+3.6	+0.3	-3.0	-4.4	-2.7	-5.2	-5.8	-3.9	+0.2	+5.5	+16.4	+12.9	+8.0	+1.4	-5.5	-4.8	+0.8	+9.0	+14.0	+14.0	+15.2	+22.1	+24.2	+21.6	+17.2	+13.9	+9.8	+3.1
TYP. SECTION	(A)		CUT (C)					EMBANKMENT (A)		CUT (C)			EMBANKMENT (A)																

REV	DATE	BY	CHK	APP	DESCRIPTION

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



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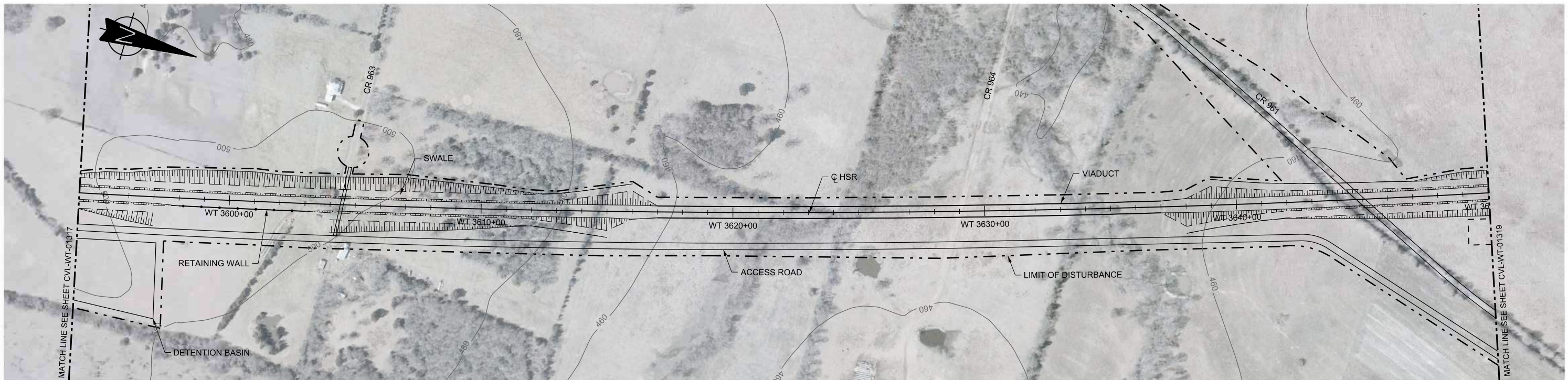
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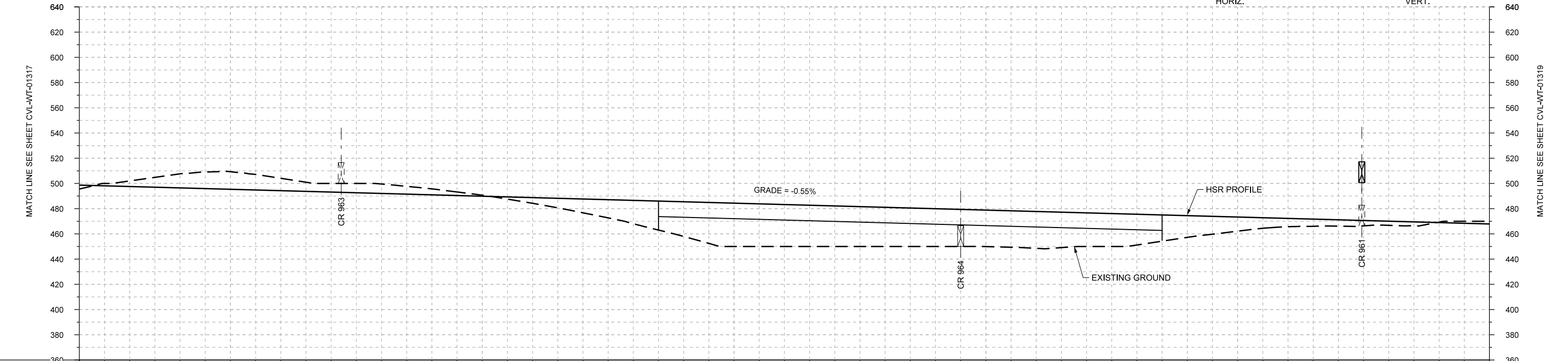
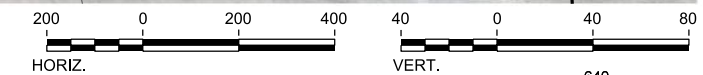
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE
WT 3538+00 TO WT 3594+00

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01317
Rev	01



PLAN



PROFILE

STATIONING	WT 3594+00	WT 3600+00	WT 3610+00	WT 3620+00	WT 3630+00	WT 3640+00	WT 3650+00																						
HOR. ALIGNMENT																													
VER. ALIGNMENT	$R=50000$ $L=24956.11224$ $G=-0.550\%$																												
CUT AND FILL	+3.1	-4.4	-11.1	-13.9	-9.8	-6.8	-7.4	-4.7	-0.8	+4.6	+11.0	+18.5	+27.5	+34.4	+33.3	+32.2	+31.1	+30.0	+29.0	+29.3	+26.7	+24.4	+17.3	+11.2	+6.6	+5.1	+3.3	-0.3	-2.1
TYP. SECTION	CUT (C)				EMBANKMENT (A)				VIADUCT (E)				EMBANKMENT (A)				CUT (C)												

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
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Texas Registered Engineering Firm: F-2144

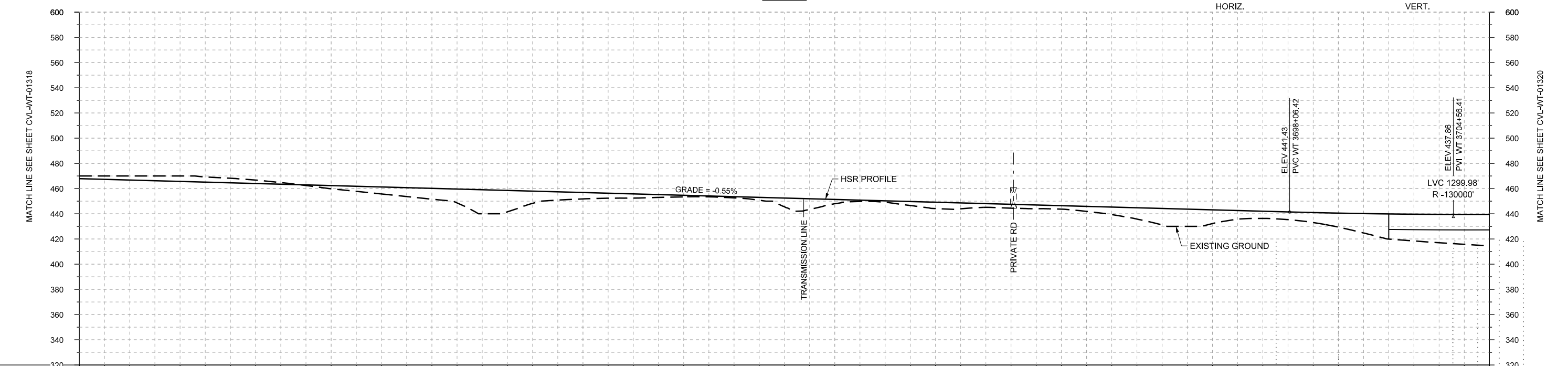
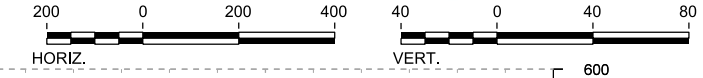
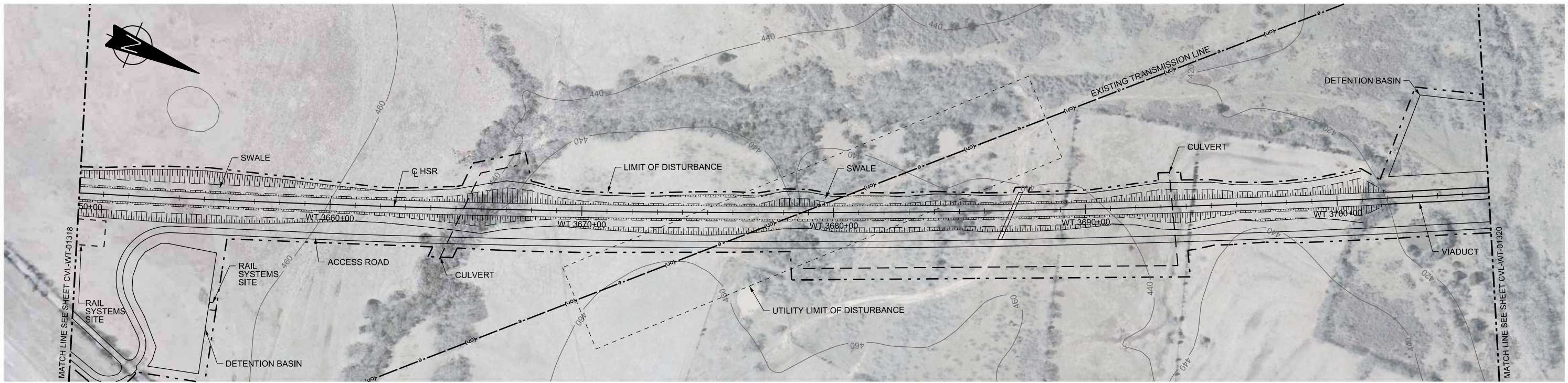
Client

TEXAS CENTRAL

1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 3594+00 TO WT 3650+00

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	Drawing No	Rev	
234180	CVL-WT-01318	01	



STATIONING	WT 3650+00	WT 3660+00	WT 3670+00	WT 3680+00	WT 3690+00	WT 3700+00	WT 3706+00																						
HOR. ALIGNMENT																													
VER. ALIGNMENT	L=16112.24 R=50000 L=25952 G=-0.550%																												
CUT AND FILL	-2.1	-3.2	-4.3	-3.6	-1.3	+2.6	+5.6	+8.6	+19.1	+9.7	+5.1	+3.4	+1.3	+1.0	+6.9	+3.4	+1.2	+5.1	+3.0	+3.0	+4.0	+9.0	+13.7	+6.8	+6.1	+1.1	+20.0	+22.5	+24.9
TYP. SECTION	CUT (C)			EMBANKMENT (A)			CUT (C)	(A)	CUT (C)	EMBANKMENT (A)	(C)	EMBANKMENT (A)			VIADUCT (E)														

PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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Client

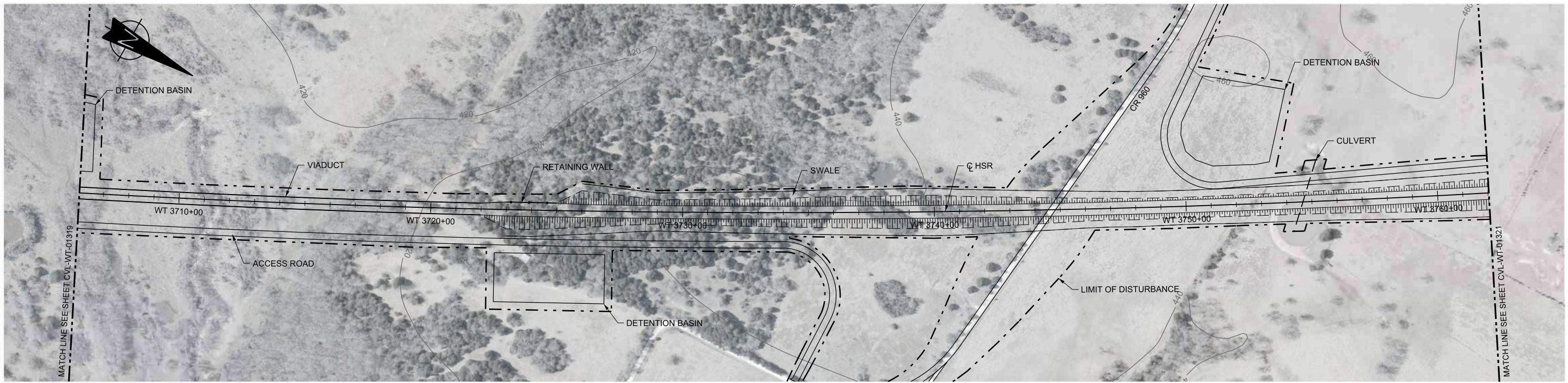
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1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

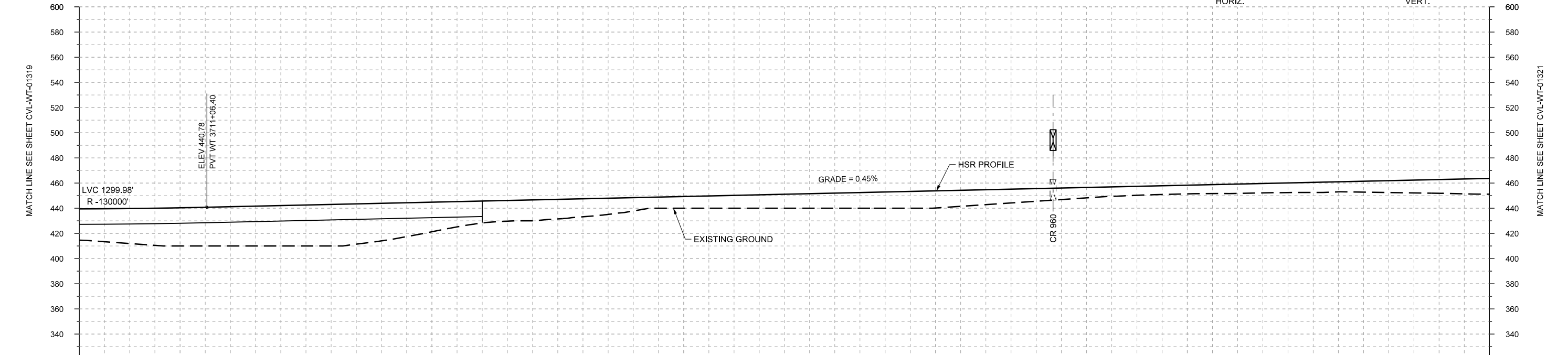
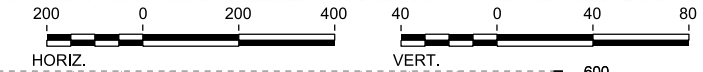
Drawing Title

**WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 3650+00 TO WT 3706+00**

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01319
Rev	01



PLAN



PROFILE

STATIONING	WT 3706+00	WT 3710+00	WT 3720+00	WT 3730+00	WT 3740+00	WT 3750+00	WT 3760+00	WT 3762+00																					
HOR. ALIGNMENT																													
VER. ALIGNMENT	$R=130000$ $R=50000$ $L=25952$ $L=6829.21$ $G=0.450\%$																												
CUT AND FILL	+24.9	+27.9	+30.3	+31.2	+32.1	+33.0	+29.8	+23.5	+17.5	+16.6	+14.3	+10.6	+9.3	+10.2	+11.1	+12.0	+12.9	+13.6	+11.8	+10.1	+8.3	+7.1	+6.9	+7.5	+7.6	+8.0	+9.4	+10.9	+12.5
TYP. SECTION	VIADUCT (E)										EMBANKMENT (A)																		

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

ARUP

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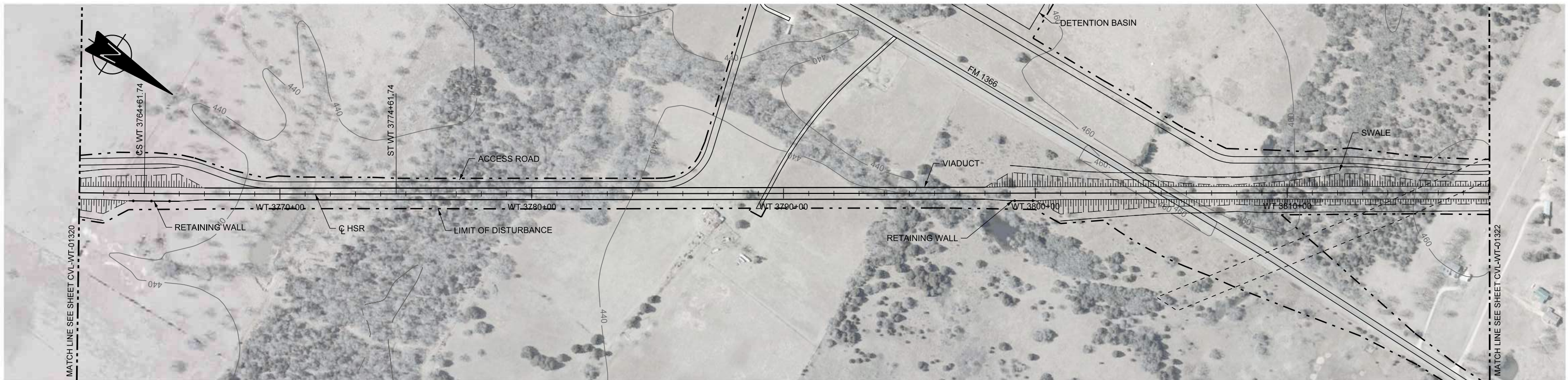
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1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

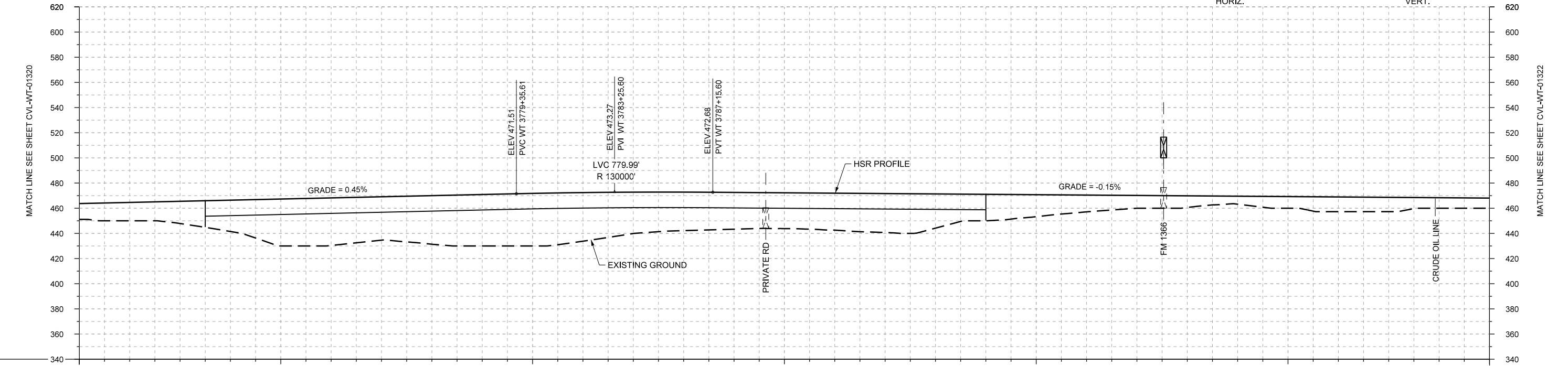
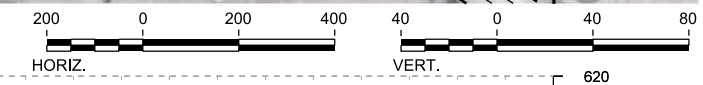
Drawing Title

WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 3706+00 TO WT 3762+00

Scale	AS SHOWN		
Drawing Status	FINAL DRAFT		
Job No	Drawing No	Rev	
234180	CVL-WT-01320	01	



PLAN



PROFILE

STATIONING	WT 3762+00	WT 3770+00	WT 3780+00	WT 3790+00	WT 3800+00	WT 3810+00	WT 3818+00
HOR. ALIGNMENT	R=50000 L=25952		L=34425				
VER. ALIGNMENT	L=1000 G=0.450%		R=130000			L=3572.41 G=-0.150%	
CUT AND FILL	+12.5	+14.6	+17.7	+24.9	+37.3	+37.8	+34.5
TYP. SECTION	EMBANKMENT (A)		VIADUCT (E)			EMBANKMENT (A)	

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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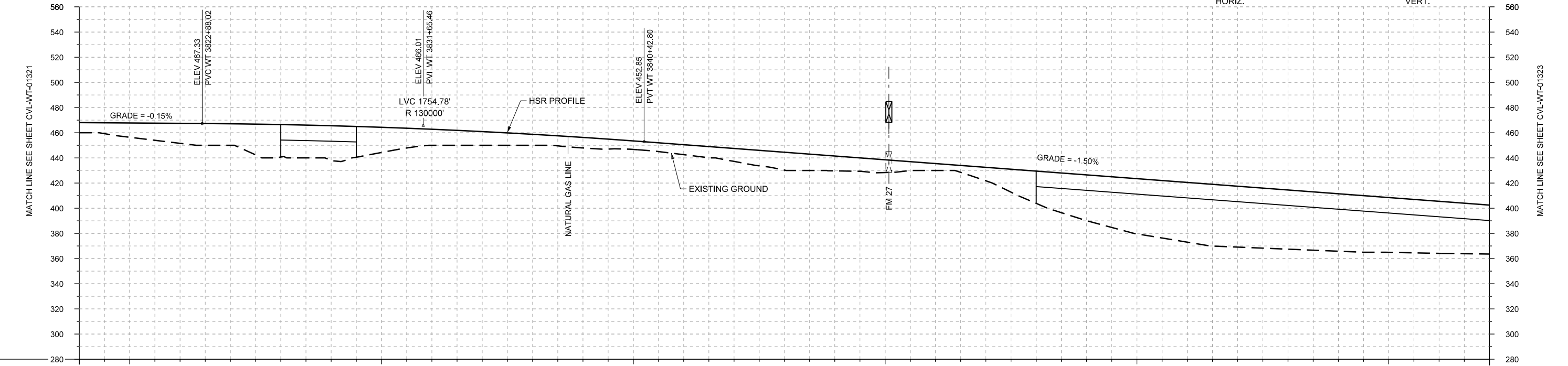
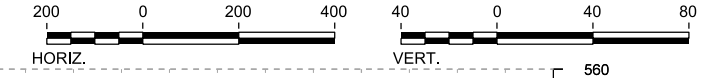
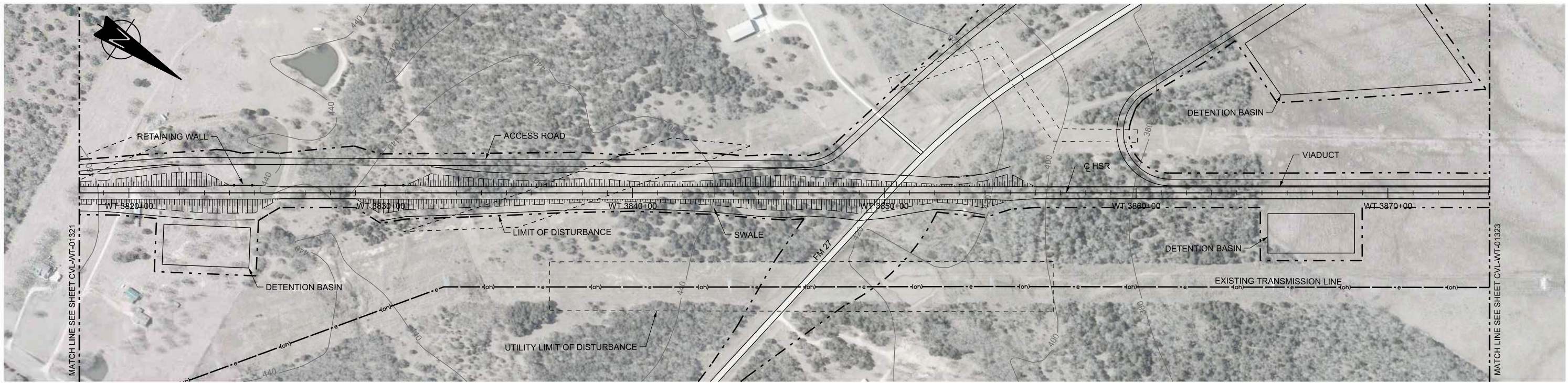
Client

TEXAS CENTRAL

1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
**WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 3762+00 TO WT 3818+00**

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01321
Rev	01



STATIONING	WT 3818+00	WT 3820+00	WT 3830+00	WT 3840+00	WT 3850+00	WT 3860+00	WT 3870+00	WT 3874+00																					
HOR. ALIGNMENT	L=34425																												
VER. ALIGNMENT	L=3572.41 G=-0.150%				R=130000		L=3633.43 G=-1.500%																						
CUT AND FILL	+8.1	+11.4	+15.9	+17.1	+25.8	+27.5	+20.0	+12.8	+10.9	+8.7	+8.4	+6.8	+7.9	+10.3	+14.2	+11.8	+10.1	+5.5	+10.7	+25.6	+36.4	+43.9	+47.5	+48.4	+47.0	+45.7	+43.6	+41.4	+36.9
TYP. SECTION	EMBANKMENT (A)			VIADUCT (K)		EMBANKMENT (F)					VIADUCT (K)																		

PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

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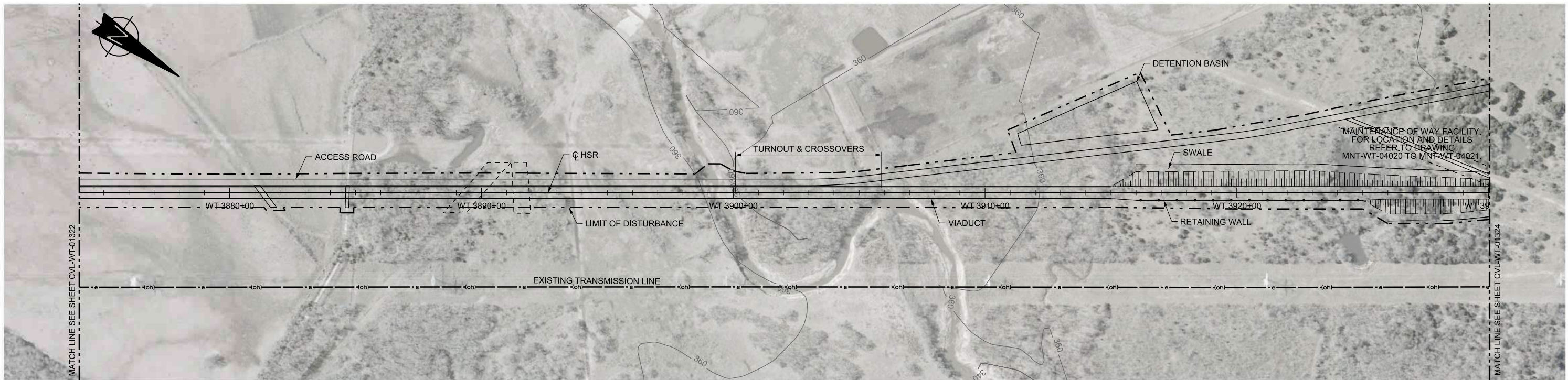
Client

TEXAS CENTRAL

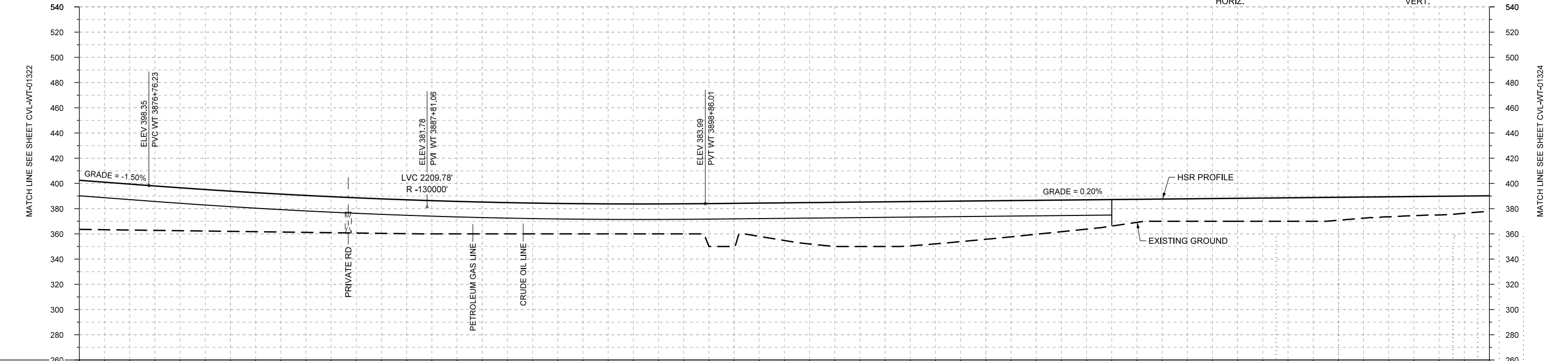
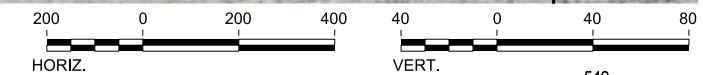
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 3818+00 TO WT 3874+00

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01322
Rev	01



PLAN



PROFILE

STATIONING	WT 3874+00	WT 3880+00	WT 3890+00	WT 3900+00	WT 3910+00	WT 3920+00	WT 3930+00																						
HOR. ALIGNMENT	L=34425																												
VER. ALIGNMENT	L=3633.43 G=-1.500%		R=130000			L=4260.14 G=0.200%																							
CUT AND FILL	+33.9	+36.5	+34.1	+31.9	+30.0	+28.6	+27.4	+26.3	+25.2	+24.4	+23.9	+23.7	+23.8	+34.2	+29.9	+35.0	+35.4	+33.7	+30.5	+28.9	+23.2	+18.3	+17.8	+18.2	+18.6	+18.2	+15.8	+14.8	+12.1
TYP. SECTION	VIADUCT (K)												EMBANKMENT (F)																

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

REV	DATE	BY	CHK	APP	DESCRIPTION

Arup Texas, Inc.
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www.arup.com
Texas Registered Engineering Firm: F-1990

2711 North Haskell Ave., Suite 3300
Dallas, Texas 75204
Tel (214) 217 2200 Fax (214) 217 2201
www.freese.com
Texas Registered Engineering Firm: F-2144

Client

1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title

WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 3874+00 TO WT 3930+00

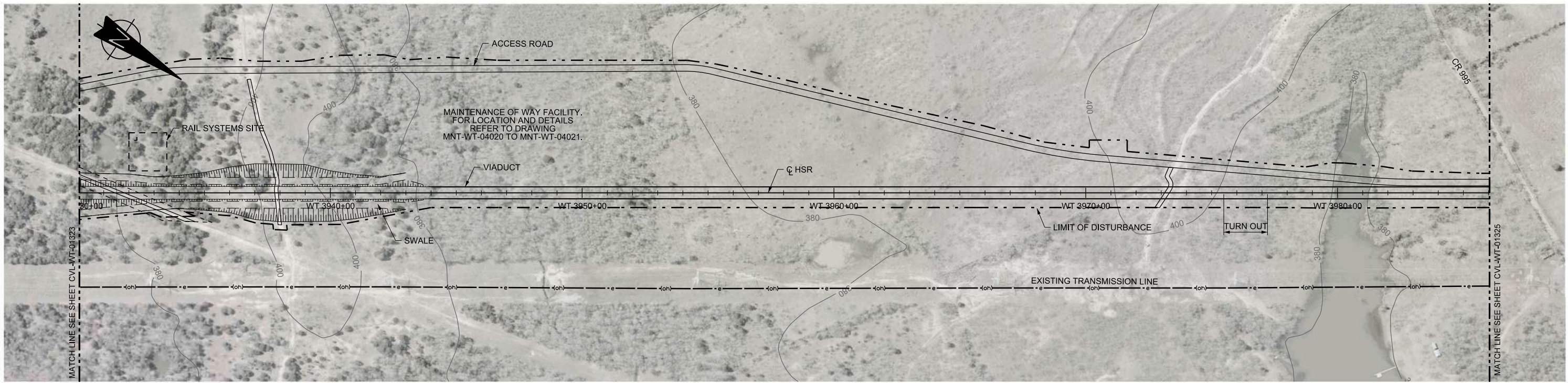
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AS SHOWN

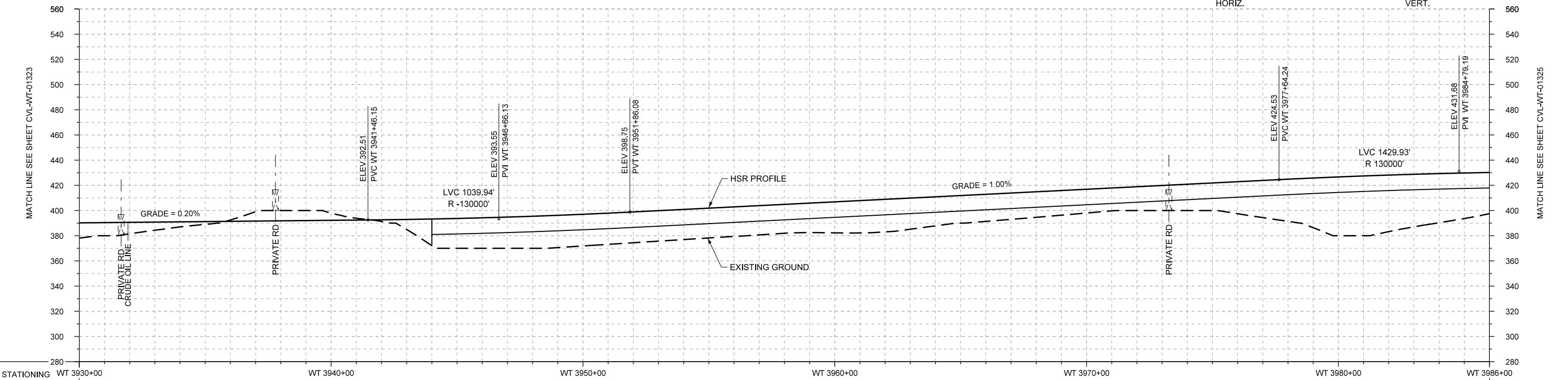
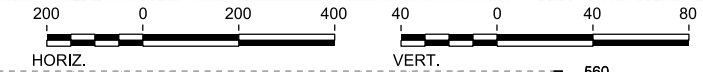
Drawing Status

FINAL DRAFT

Job No	Drawing No	Rev
234180	CVL-WT-01323	01



PLAN



PROFILE

STATIONING	WT 3930+00	WT 3940+00	WT 3950+00	WT 3960+00	WT 3970+00	WT 3980+00	WT 3986+00																					
HOR. ALIGNMENT	L=34425																											
VER. ALIGNMENT	L=4260.14 G=0.200%		R=130000		L=2578.16 G=1.000%		R=130000																					
CUT AND FILL	+12.1	+9.1	+4.0	-1.1	-6.2	-5.7	+1.3	+21.2	+24.2	+25.5	+25.1	+24.5	+23.9	+23.6	+24.6	+25.8	+23.1	+1.5	+20.3	+18.9	+18.9	+20.9	+25.4	+33.5	+46.7	+44.9	+39.0	+32.7
TYP. SECTION	EMBANKMENT (F)		CUT (H)				VIADUCT (K)																					

REV	DATE	BY	CHK	APP	DESCRIPTION

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

ARUP
 Arup Texas, Inc.
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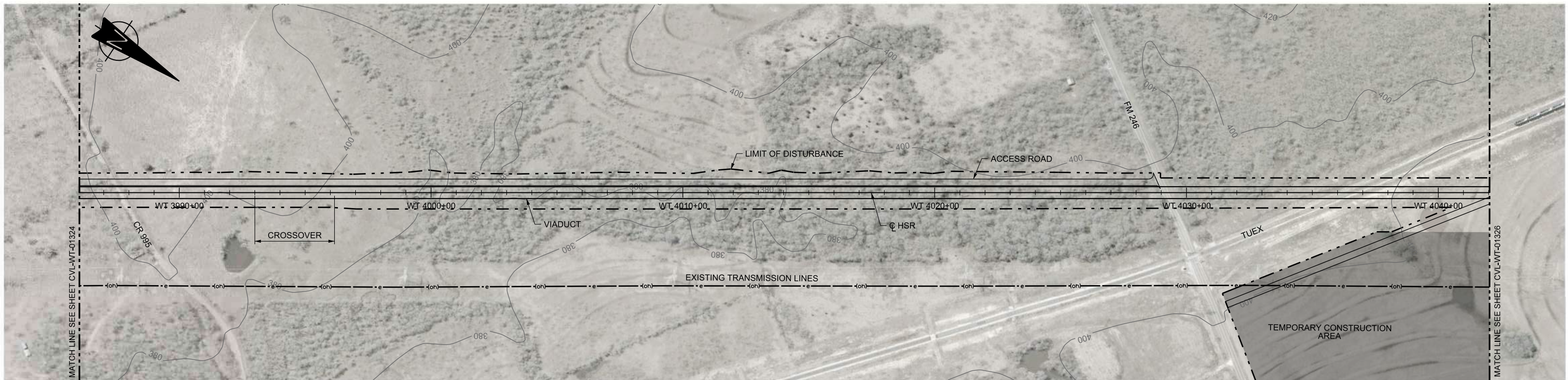
FREESSE AND NICHOLS
 2711 North Haskell Ave., Suite 3300
 Dallas, Texas 75204
 Tel (214) 217 2200 Fax (214) 217 2201
 www.freese.com
 Texas Registered Engineering Firm: F-2144

Client

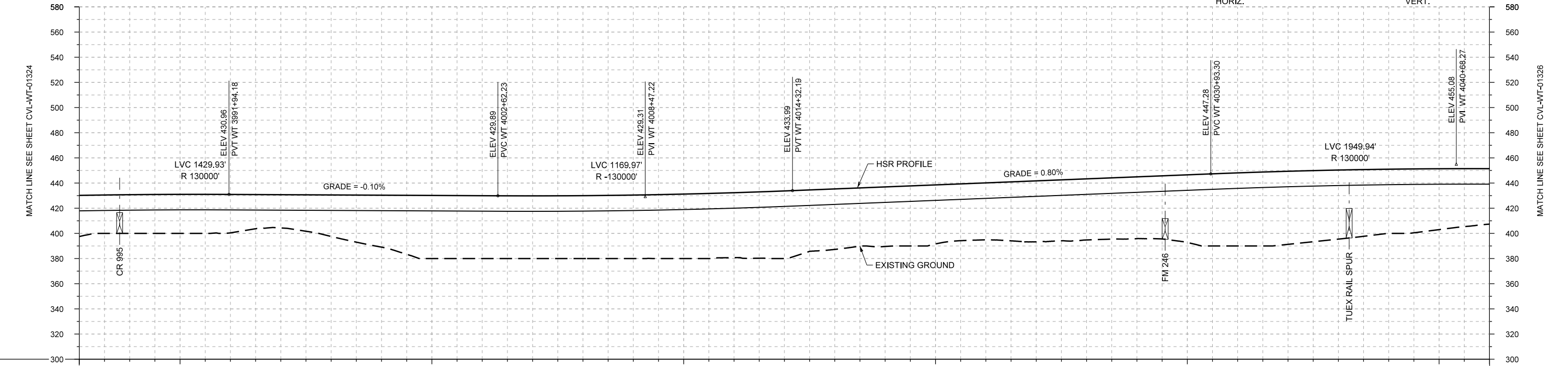
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL
PLAN AND PROFILE
WT 3930+00 TO WT 3986+00

Scale
 AS SHOWN
 Drawing Status
FINAL DRAFT
 Job No 234180 Drawing No CVL-WT-01324 Rev 01



PLAN



PROFILE

STATIONING	WT 3986+00	WT 3990+00	WT 4000+00	WT 4010+00	WT 4020+00	WT 4030+00	WT 4040+00	WT 4042+00																					
HOR. ALIGNMENT	L=34425																												
VER. ALIGNMENT	R=130000		L=1068.05 G=-0.100%		R=-130000		L=1661.10 G=0.800%																						
CUT AND FILL	+32.7	+30.8	+31.0	+30.6	+26.5	+33.0	+41.3	+50.2	+50.0	+49.8	+50.0	+50.5	+51.2	+51.6	+53.7	+48.0	+47.3	+46.9	+45.2	+48.4	+48.5	+49.1	+53.7	+58.1	+58.1	+54.8	+51.0	+48.4	+44.1
TYP. SECTION	VIADUCT (K)																												

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017



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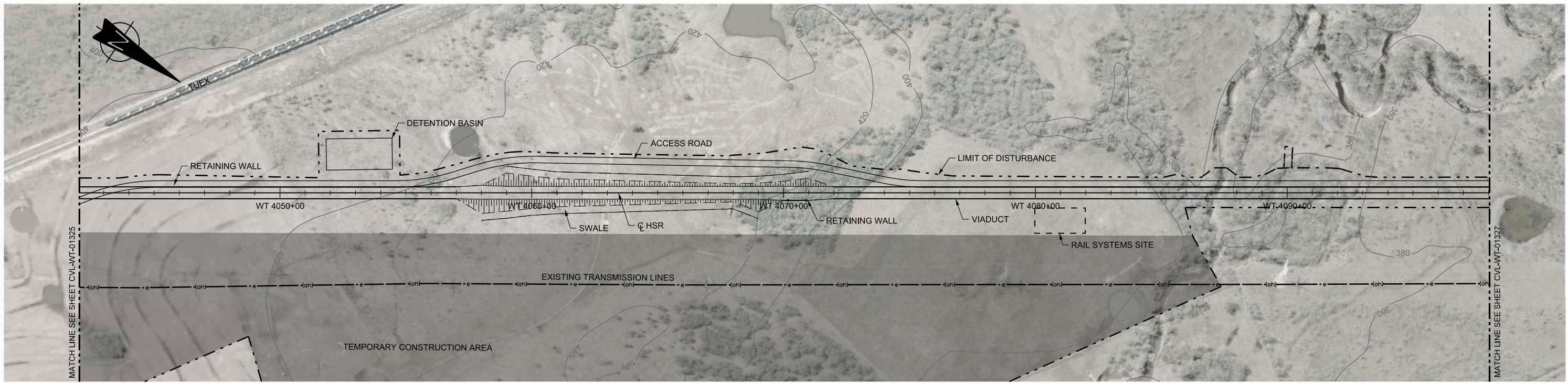
2711 North Haskell Ave., Suite 3300
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Tel (214) 217 2200 Fax (214) 217 2201
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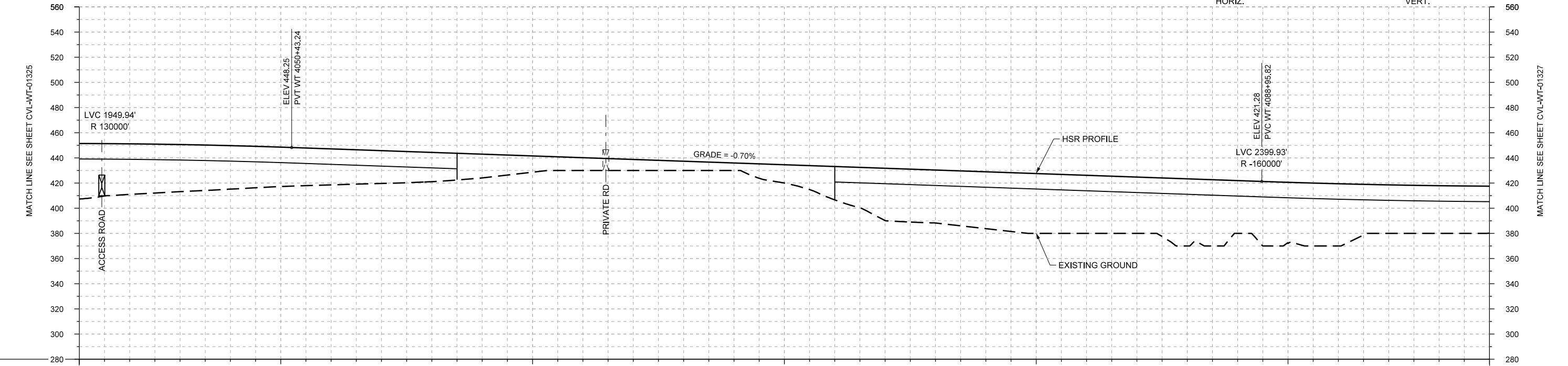
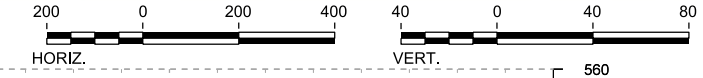
Client
1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 3986+00 TO WT 4042+00

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01325
Rev	01



PLAN



PROFILE

STATIONING	WT 4042+00	WT 4050+00	WT 4060+00	WT 4070+00	WT 4080+00	WT 4090+00	WT 4098+00																						
HOR. ALIGNMENT	L=34425																												
VER. ALIGNMENT	R=130000		L=3852.58 G=-0.700%			R=-160000																							
CUT AND FILL	+44.1	+40.2	+37.4	+34.5	+31.2	+28.7	+26.1	+23.3	+19.9	+13.0	+10.2	+8.8	+7.4	+6.0	+14.6	+26.6	+41.6	+42.1	+45.2	+47.6	+45.2	+44.8	+53.4	+42.0	+48.5	+49.4	+38.5	+37.9	+37.3
TYP. SECTION	VIADUCT (K)					EMBANKMENT (F)					VIADUCT (K)																		

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
F. DAGRIN

DRAWN BY
R. GIBBINS

CHECKED BY
K. SEYMOUR

IN CHARGE
C. TAYLOR

DATE
09/15/2017

ARUP
 Arup Texas, Inc.
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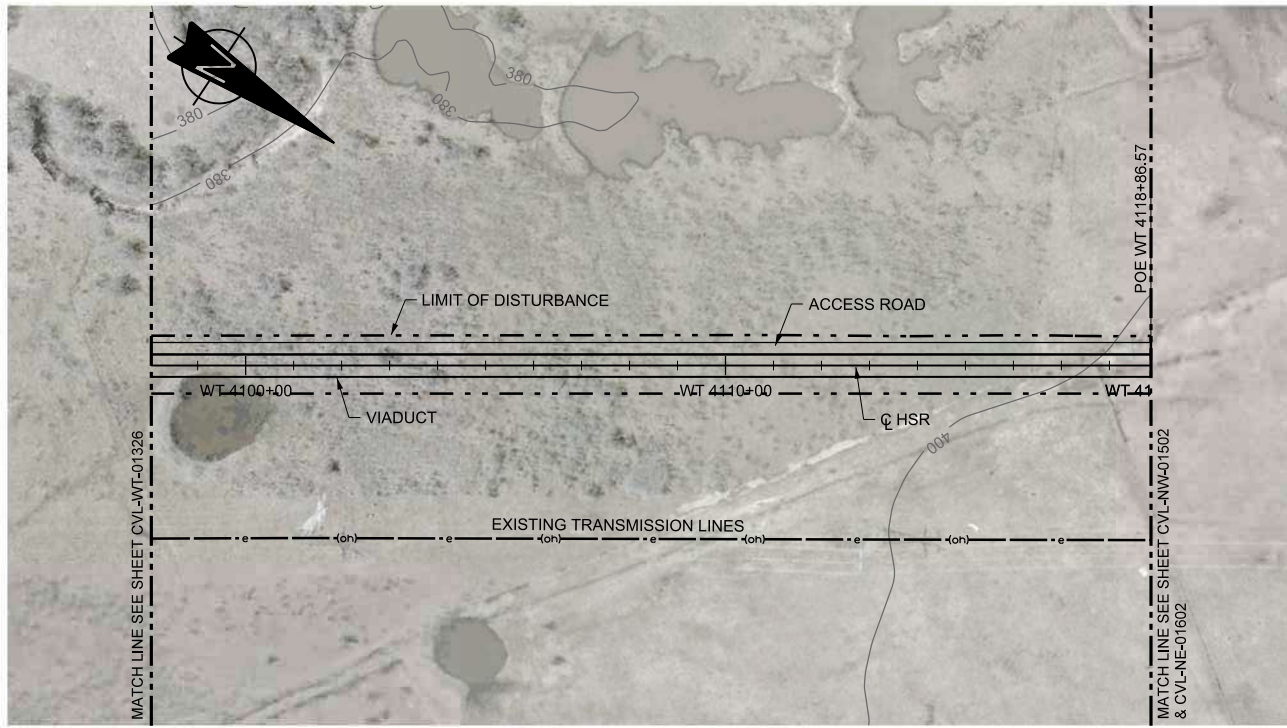
FREESSE AND NICHOLS
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Client

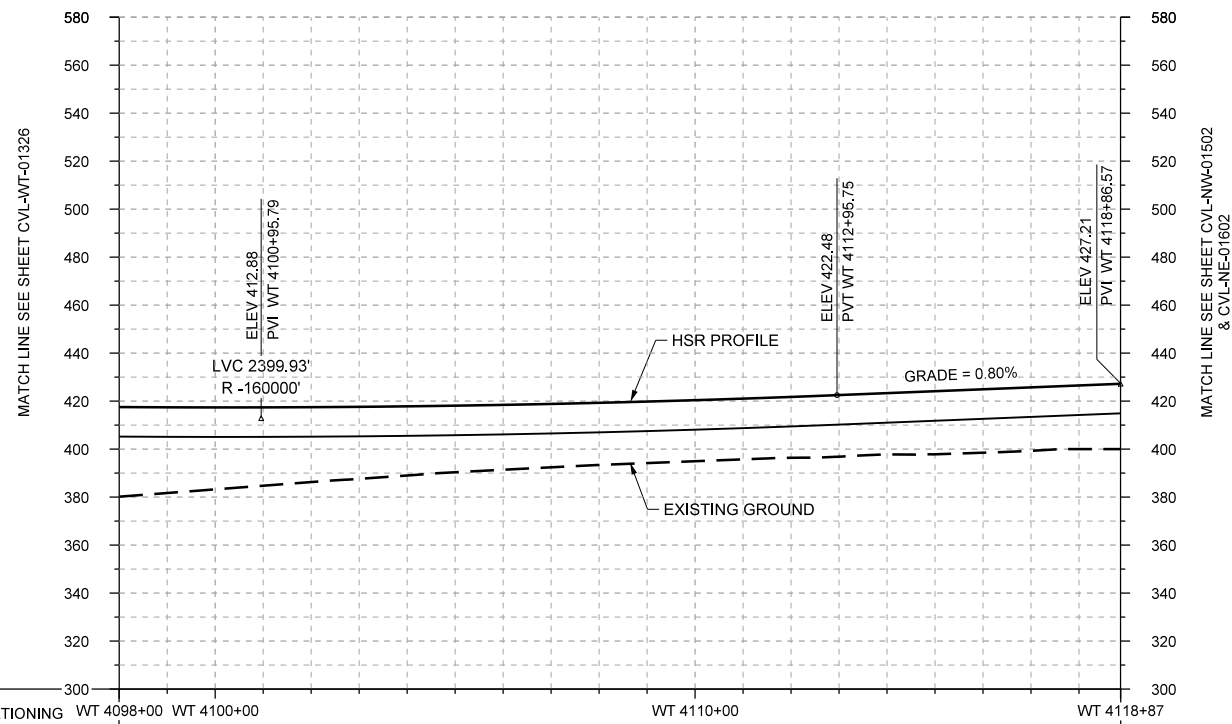
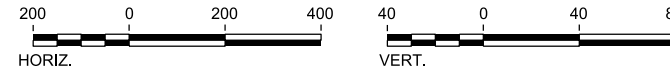
TEXAS CENTRAL
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE WT 4042+00 TO WT 4098+00

Scale	AS SHOWN
Drawing Status	FINAL DRAFT
Job No	234180
Drawing No	CVL-WT-01326
Rev	01



PLAN



STATIONING	WT 4098+00	WT 4100+00	WT 4110+00	WT 4118+87
HOR. ALIGNMENT	L=34425			
VER. ALIGNMENT	R=-160000			
CUT AND FILL	+37.3	+34.2	+31.2	+28.8
	+27.0	+25.9	+25.4	+25.3
	+25.5	+25.4	+25.5	+25.4
	+25.4	+25.5	+25.4	+25.5
TYP. SECTION	VIADUCT (K)			

PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

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

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 www.freese.com
 Texas Registered Engineering Firm: F-2144

Client

TEXAS CENTRAL
 1409 South Lamar Street, Suite 1022, Dallas, Texas 75215

Drawing Title
WEST OF TEAGUE SEGMENT CIVIL PLAN AND PROFILE
 WT 4098+00 TO WT 4118+87

Scale
 AS SHOWN
 Drawing Status
FINAL DRAFT
 Job No. 234180 Drawing No. CVL-WT-01327 Rev 01