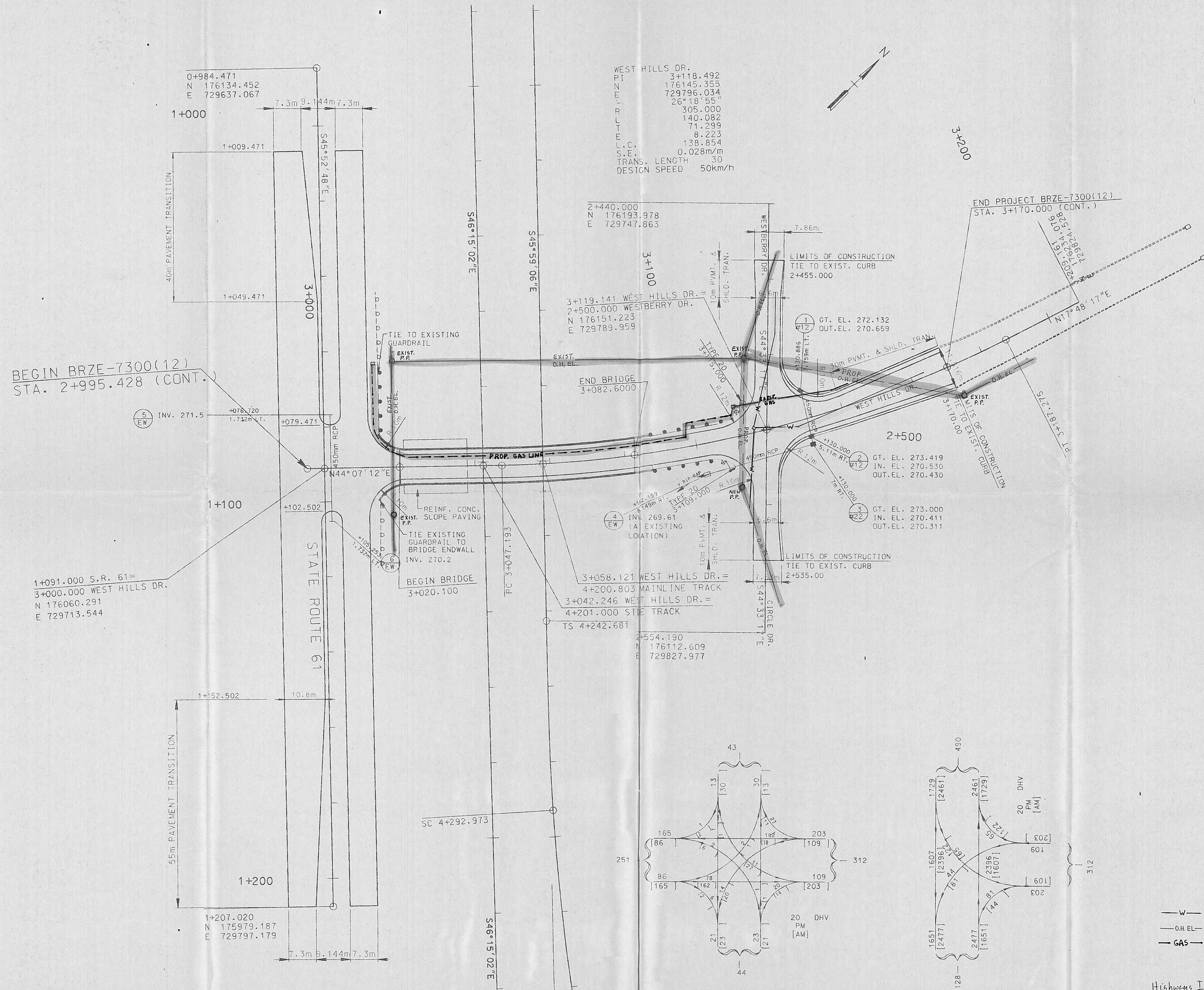


R.O.W. 73950-2532-94

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.



CHECKED & APPROVED

By Arthur L. Hyde

Date 10-16-96



COORDINATE VALUES ARE NAD/83(1990)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.0001 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

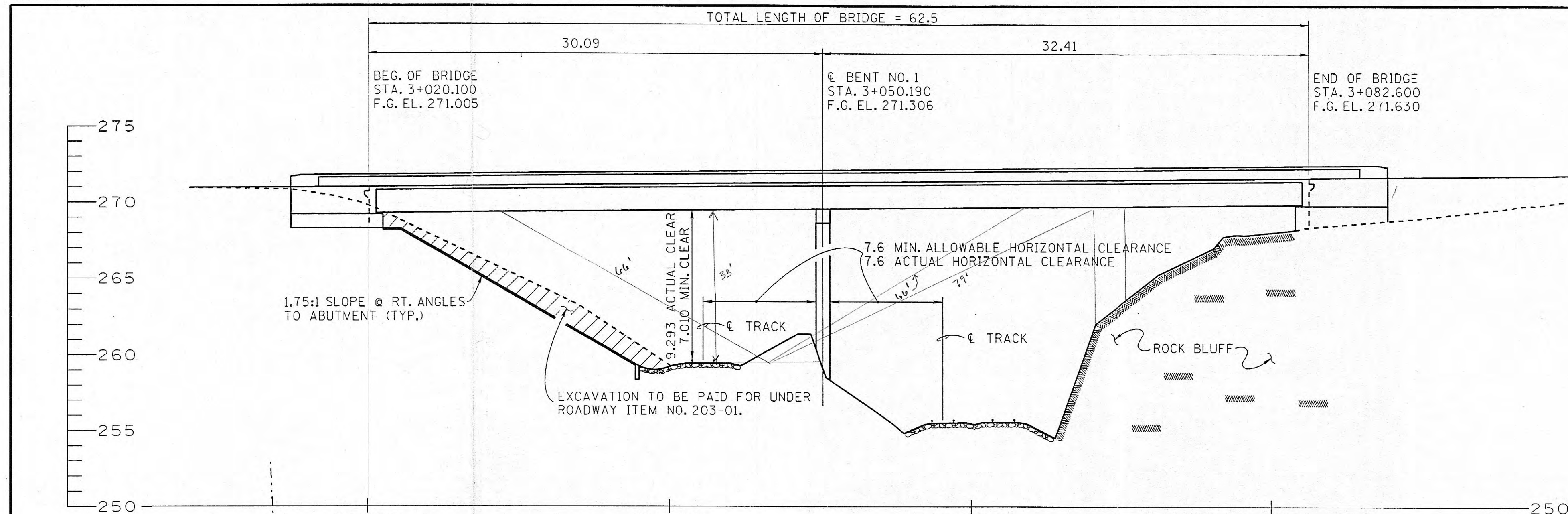
STA. 2+995 TO STA. 3+170

SCALE: 1:500

Highways Inc. - Contractor

Start March 1st

—W— WATER LINE
—O.H. EL.— ELECTRIC LINE
—GAS— NATURAL GAS LINE

ELEVATION
(SCALE = 1:200)CURVE DATA
(WEST HILLS DRIVE)

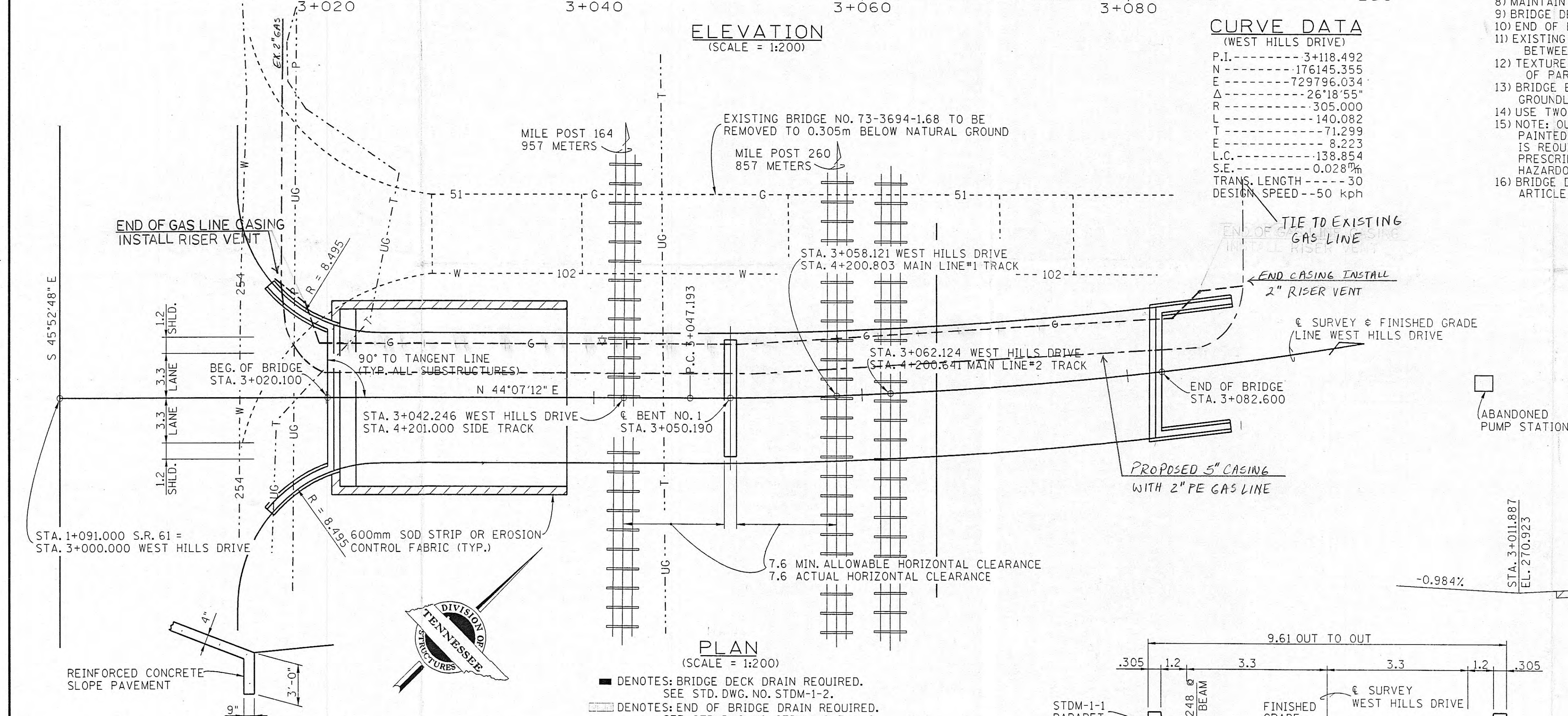
P.I.	3+118.492
N	176145.355
E	729796.034
Δ	26°18'55"
R	305.000
L	140.082
T	71.299
E	8.223
L.C.	138.854
S.E.	0.028%
TRANS. LENGTH	30
DESIGN SPEED	50 kph

GENERAL NOTES:

- 1) SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION (MARCH 1, 1995 EDITION).
- 2) DESIGN SPECIFICATION: AASHTO 1992 EDITION WITH ADDENDA INCLUDING THE STANDARD SPECIFICATIONS FOR SEISMIC DESIGN OF HIGHWAY BRIDGES. (SEISMIC PERFORMANCE CATEGORY 'A' WITH ACCELERATION COEFFICIENT 0.080).
- 3) LOADING: MS18-44 (DEAD LOADS TO INCLUDE 1580 N/m² FOR FUTURE OVERLAY)
- 4) CONCRETE: CLASS 'A' f'c = 21 MPa, BRIDGE DECK CLASS 'D' f'c = 28 MPa
- 5) REINFORCING STEEL: TO BE ASTM A615M GRADE 400 (EPOXY COAT ALL SLAB STEEL)
- 6) SUPERSTRUCTURE: TO CONSIST OF 2 SPAN CONTINUOUS PRECAST PRESTRESSED CONCRETE BULB-T BEAMS (BT-1600) WITH CONCRETE DECK SLAB.
- 7) USE STD-M-1-1 PARAPET.
- 8) MAINTAIN TRAFFIC ON EXISTING BRIDGE DURING CONSTRUCTION OF PROPOSED BRIDGE.
- 9) BRIDGE DECK DRAINS ARE REQUIRED.
- 10) END OF BRIDGE DRAINS ARE REQUIRED.
- 11) EXISTING BRIDGES 73-3694-1.68 AND APPROACHES TO BE REMOVED TO NATURAL GROUND BETWEEN STATIONS 3+028.000 AND 3+080.000.
- 12) TEXTURE COATING: TO BE MOUNTAIN GREY (36440), EXCEPT INSIDE FACE AND TOP OF PARAPET TO BE WHITE (37886).
- 13) BRIDGE EXCAVATION: BASED ON FINAL PROFILE AT ABUTMENT NO. 1 AND EXISTING GROUNDLINE AT BENT NO. 1 AND ABUTMENT NO. 2.
- 14) USE TWO POST BENT.
- 15) NOTE: OUR MAINTENANCE RECORDS INDICATE THIS BRIDGE MAY HAVE ORIGINALLY BEEN PAINTED WITH MATERIALS CONTAINING LEAD AND/OR CHROMATES AND THE CONTRACTOR IS REQUIRED TO PROCEED ACCORDINGLY TO TAKE ALL MANDATORY SAFEGUARDS PRESCRIBED BY STATE AND FEDERAL LAW FOR BOTH WORKER PROTECTION AND HAZARDOUS MATERIALS DISPOSAL.
- 16) BRIDGE DECK SURFACE FINISH: TO BE IN ACCORDANCE WITH NOTE C IN ARTICLE 604.23 OF THE STANDARD SPECIFICATIONS.

EXISTING BRIDGE DISCRIPTION:

FOUR SPAN ROLLED STEEL I-BEAM WITH CONCRETE SUBSTRUCTURES. SPANS OF APPROXIMATELY 6.3m, 15.9m, 15.5m, 11.2m TOTALING 48.9 IN LENGTH AND AN OUT-TO-OUT WIDTH OF 6.71m. EXISTING BRIDGE IS TO BE COMPLETELY REMOVED TO 0.305m BELOW NATURAL NATURAL AND TO THE COMPLETE SATISFACTION OF THE ENGINEER.

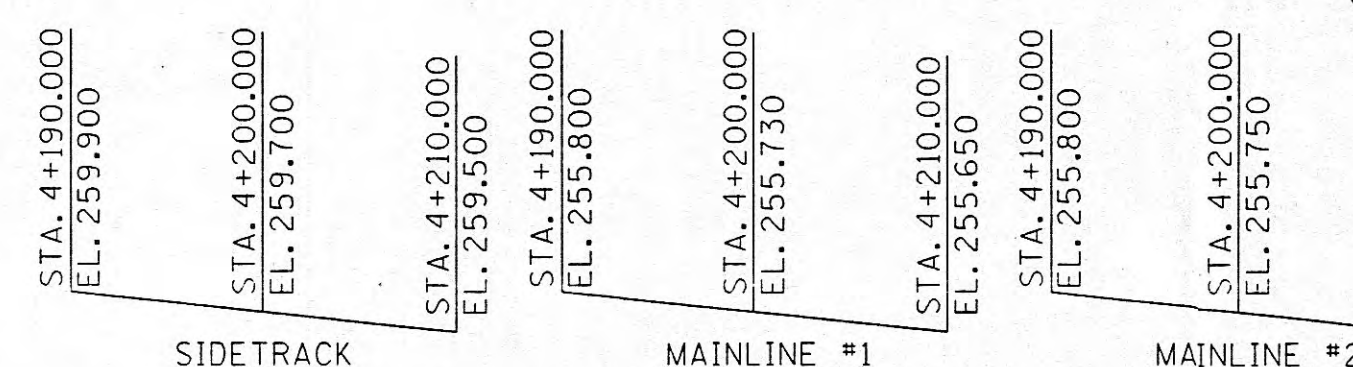
PLAN
(SCALE = 1:200)

- DENOTES: BRIDGE DECK DRAIN REQUIRED. SEE STD. DWG. NO. STD-M-1-2.
- DENOTES: END OF BRIDGE DRAIN REQUIRED. SEE STD. DWG. NO. STD-M-1-6, 7, & 9.
- ☆ DENOTES: POINT OF MINIMUM VERTICAL CLEARANCE STA. 3+041.001 WEST HILLS DRIVE STA. 4+197.055 SIDE TRACK

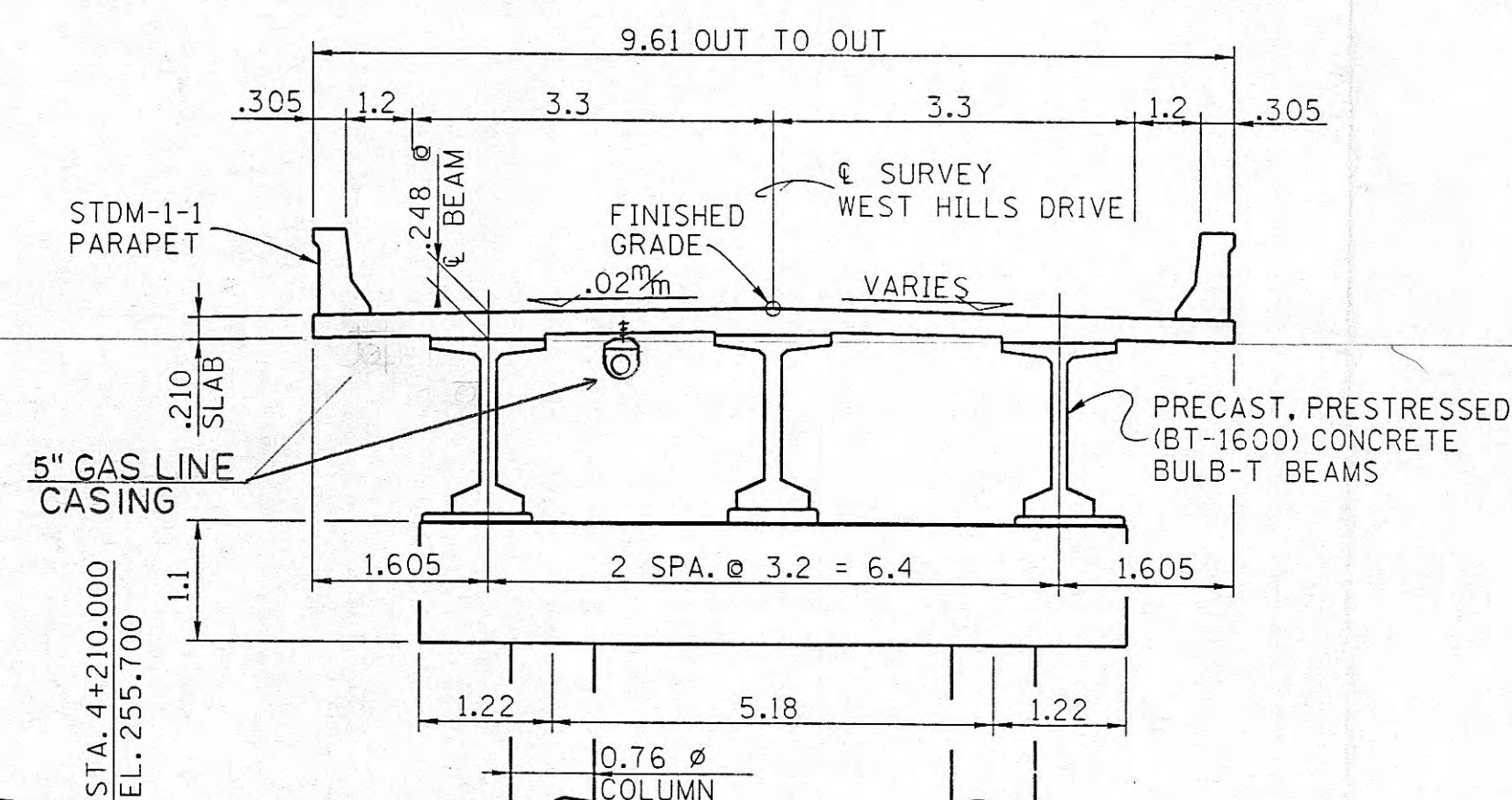
PAVEMENT DETAIL AT RAILROAD DITCH

PAVE SLOPES AND EXPOSED EARTH UNDER BRIDGES WITH 4" THICK CEMENT CONCRETE SLAB REINFORCED WITH NO. 4 GAGE WIRE FABRIC @ 6" CENTERS AND 58 LB. PER 100 S.F. THE WIRE FABRIC REINFORCEMENT SHALL BE PLACED AT ONE-HALF THE DEPTH OF THE SLAB AND EXTEND TO WITHIN 3" OF ITS EDGE WITH A 12" LAP REQUIRED ON ALL SHEETS. THE COST OF THE WIRE FABRIC REINFORCEMENT TO BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 709-04, REINFORCED CONCRETE SLOPE PAVEMENT. ONE-HALF INCH PREMOULDED EXPANSION JOINTS WITHOUT LOAD TRANSFERS SHALL BE FORMED ABOUT ALL STRUCTURES AND FEATURES PROJECTING THROUGH, IN OR AGAINST THE SLAB. THE SLAB SHALL BE GROOVED PARALLEL WITH AND AT RIGHT ANGLES TO THE UNDER ROADWAY CENTER LINE AT 6" CENTERS. DEPTH OF GROOVE TO BE NOT LESS THAN 1". (SEE STANDARD DRAWING RD-SA-1 FOR LIMITS OF SLOPE PROTECTION.)

DESIGNED BY JOHN HASTINGS DATE 12-95
DRAWN BY K.L. FRANKENFELD DATE 12-95
SUPERVISED BY H. PATE DATE 12-95
CHECKED BY DATE -95



RAILROAD PROFILES

TYPICAL CROSS-SECTION
(LOOKING FORWARD ON SURVEY)

GRADE SKETCH

2016 ADT =
9.0 ROADWAY WITH STD-M-1-1 PARAPET
DESIGN SPEED = 30 kph

NOTE: ALL DIMENSIONS SHOWN IN METERS UNLESS OTHERWISE NOTED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PRELIMINARY LAYOUT
WEST HILLS DRIVE
OVER
NORFOLK SOUTHERN RAILROAD
BRIDGE I.D. NO.
STATION 3+058.050
ROANE COUNTY
1996

CORRECT *Edward P. Wasserman*
ENGINEER OF STRUCTURES

M- -