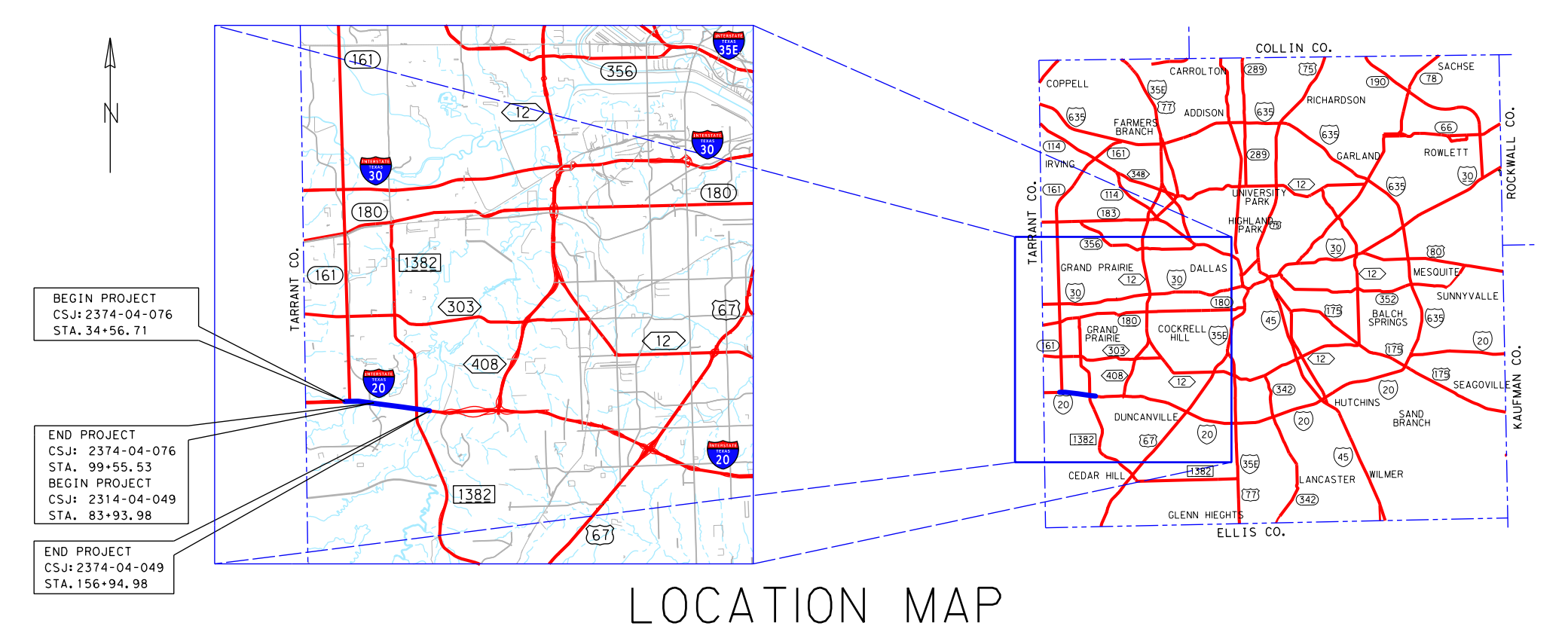
Texas Department of Transportation®

DALLAS DISTRICT
DESIGN SCHEMATIC
KELLY SELMAN, P.E., DISTRICT ENGINEER
DALLAS COUNTY
INTERSTATE HIGHWAY 20 FRONTAGE ROADS
PROJECT LIMIT: FROM SH 161 TO
FM 1382 (BELT LINE ROAD)
CONTROL: 2374-04-049 & 2374-04-076
FUNCTIONAL CLASS: INTERSTATE
DESIGN SPEED: 70 mph MAINLANES
40 mph FRONTAGE ROADS
45 mph RAMPS
30 mph CROSS STREETS
PROJECT LENGTH = 2.318 MI.


N
BEGIN PROJECT
CSJ: 2374-04-076
STA. 34+56.71
END PROJECT
CSJ: 2374-04-076
STA. 99+55.53
BEGIN PROJECT
CSJ: 2374-04-049
STA. 83+93.98
END PROJECT
CSJ: 2374-04-049
STA. 156+94.98
COLLIN CO.
TARRANT CO.
ROCKWALL CO.
KAUFMAN CO.
ELLIS CO.

LOCATION MAP
NOT TO SCALE

MARCH 09, 2015
SCALE: 1"=200' H, 1"=20'V
ROLL 2 OF 3

PRELIMINARY
FOR INTERIM REVIEW ONLY

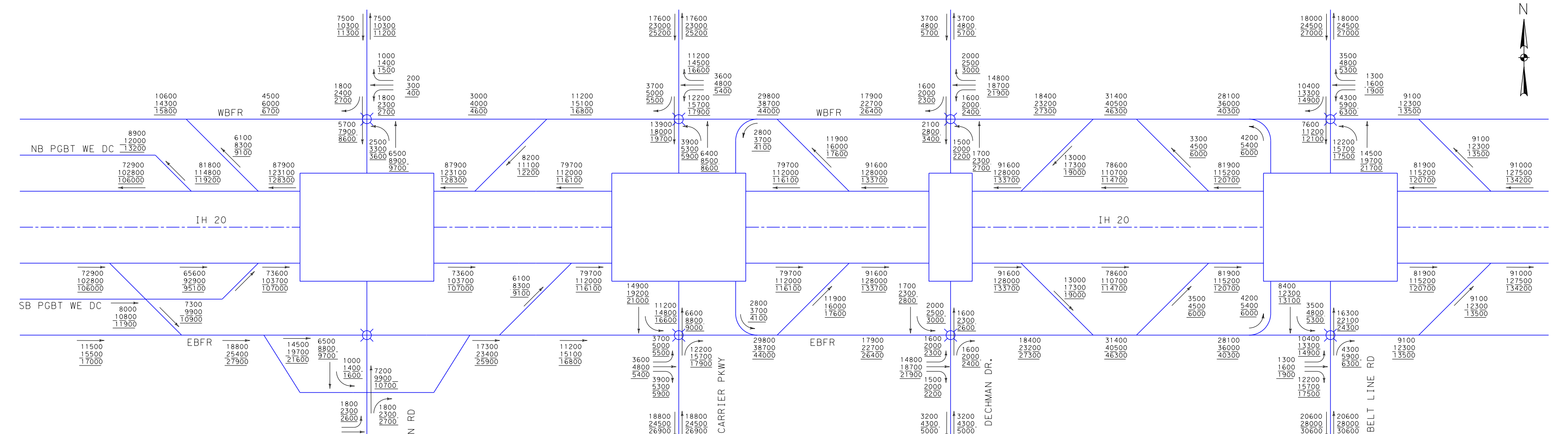
THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT INTENDED FOR REGULATORY APPROVAL, PERMIT, BIDDING OR CONSTRUCTION PURPOSES. THEY WERE PREPARED BY OR UNDER THE SUPERVISION OF:

MATTHEW G. CRAIG 69910 3-09-15
NAME P.E. NO. DATE
THUC Q. PHAM 91115 3-09-15
NAME P.E. NO. DATE

HALFF ASSOCIATES, INC.
TBPE FIRM #F-312

HALFF
1201 NORTH BOWSER ROAD
RICHARDSON, TEXAS 75081-2275
TEL (214) 346-6200

© 2015 BY Texas Department of Transportation all rights reserved


N
IH 20
WBFR
EBFR
NB PGBT WE DC
SB PGBT WE DC
ROBINSON RD
CARRIER PKWY
DECHMAN DR.
BELT LINE RD

LEGEND
1,000 - 2015 ADT
1,000 - 2035 ADT
1,000 - 2045 ADT
⊠ - SIGNALIZED INTERSECTION

NOTE:
TRAFFIC PROJECTIONS PROVIDED BY CDM SMITH, INC. AND APPROVED BY TxDOT TP&P ON AUGUST 28, 2013.

TRAFFIC DIAGRAM
N.T.S.

EBFR TRANSITION

STATION	TEMPLATE	STATION	TEMPLATE
BEGIN	MATCH EXISTING SLOPE BL EBFR	85+90	-2.00% BL EBFR
39+00	-2.00% BL EBFR	89+40	+2.00% BL EBFR
56+28	-2.00% BL EBFR	93+50	+2.00% BL EBFR
58+08	+2.00% BL EBFR	96+12	-2.00% BL EBFR
63+70	+2.00% BL EBFR	155+00	-2.00% BL EBFR
65+50	-2.00% BL EBFR	END	MATCH EXISTING SLOPE BL EBFR

WBFR TRANSITION

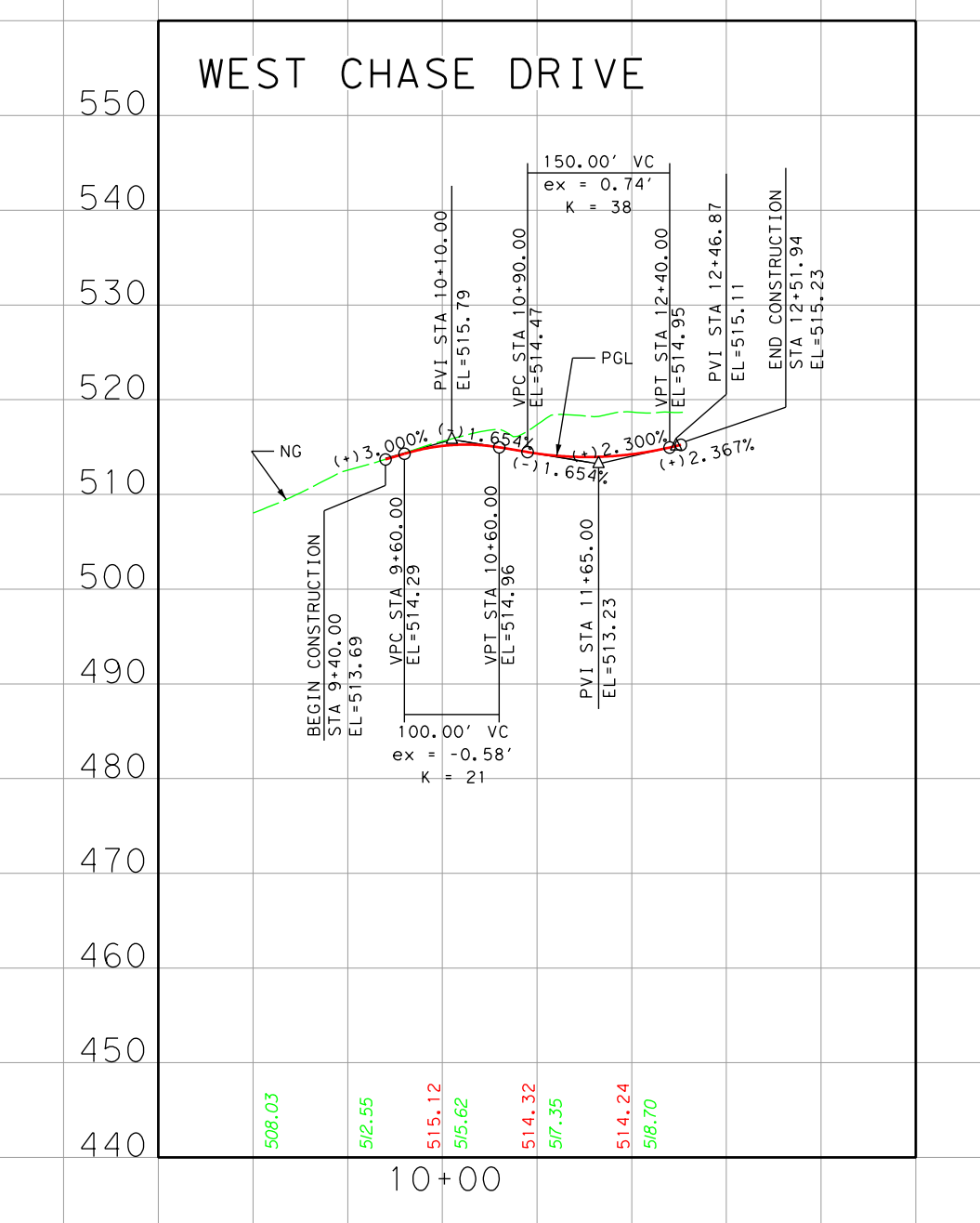
STATION	TEMPLATE	STATION	TEMPLATE
BEGIN	BL WBFR MATCH EXISTING SLOPE	88+90	BL WBFR -2.00%
54+00	BL WBFR	93+00	BL WBFR -2.00%
56+00	BL WBFR -2.00%	96+50	BL WBFR +2.00%
61+50	BL WBFR -2.00%	155+00	BL WBFR +2.00%
63+30	BL WBFR +2.00%	END	BL WBFR MATCH EXISTING SLOPE
86+30	BL WBFR +2.00%		

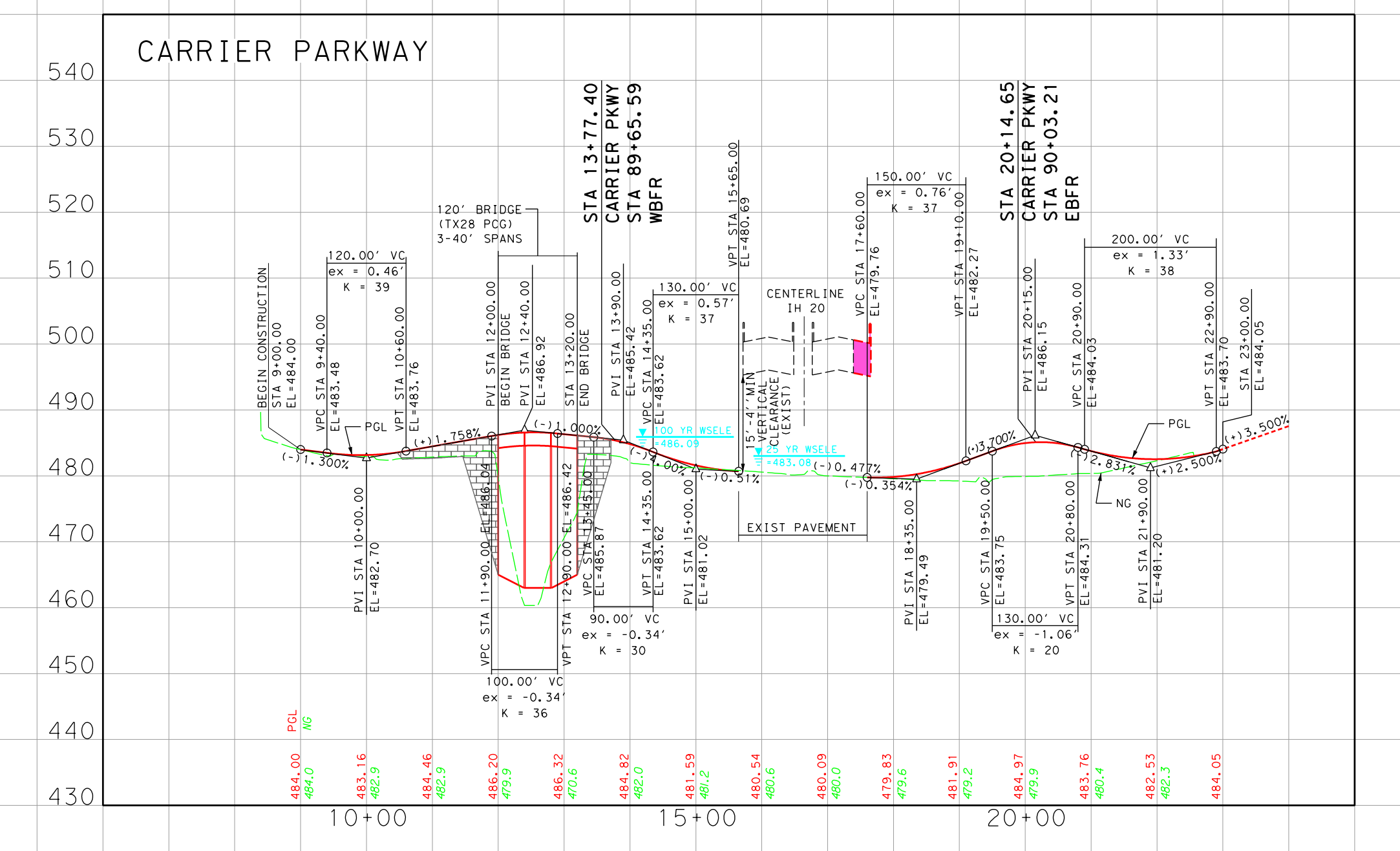
R1NWB TRANSITION

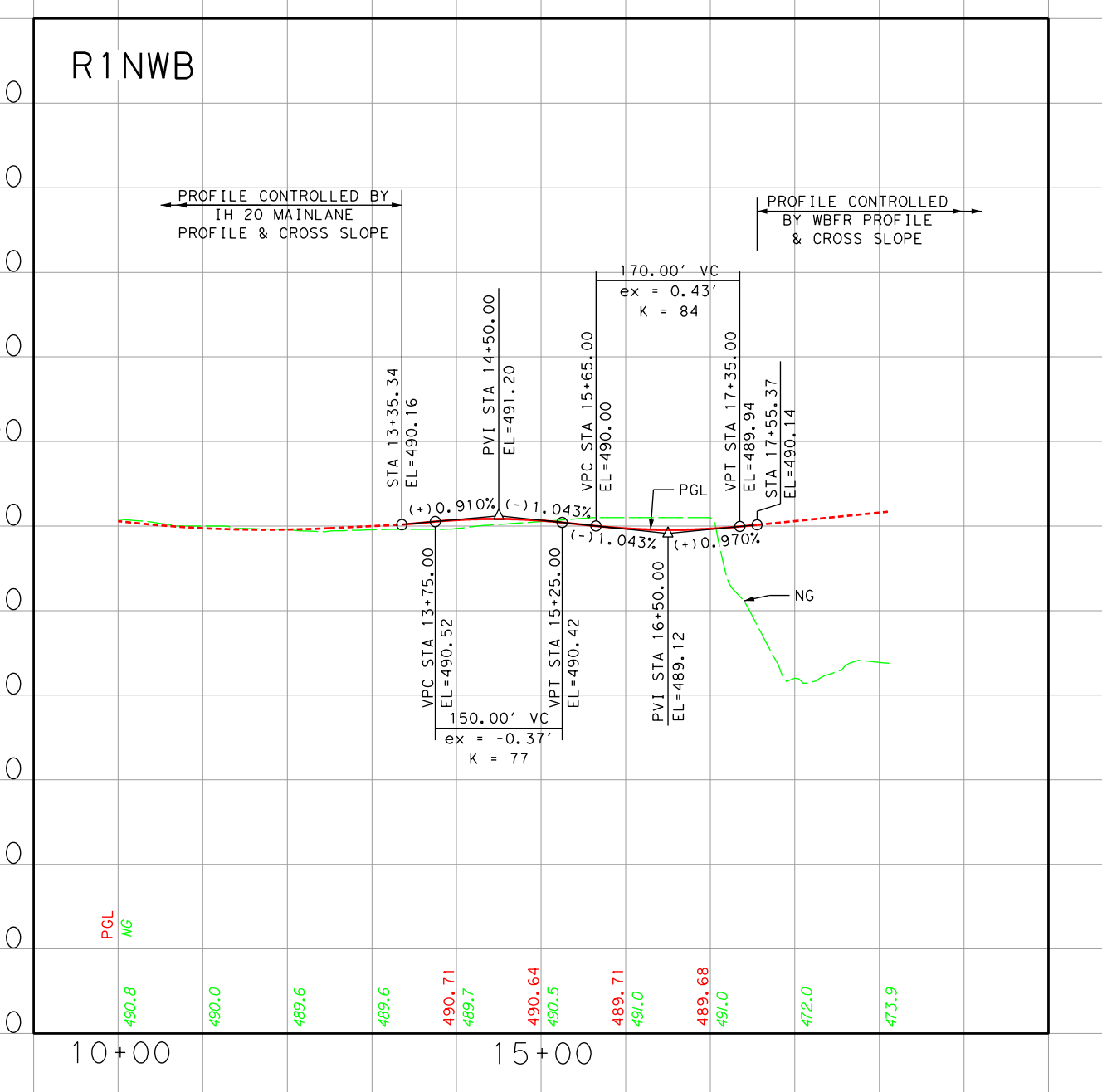
STATION	TEMPLATE
9+30	BL R1NWB -2.80%
11+00	BL R1NWB +3.70%
16+40	BL R1NWB +3.70%
16+90	BL R1NWB +2.00%

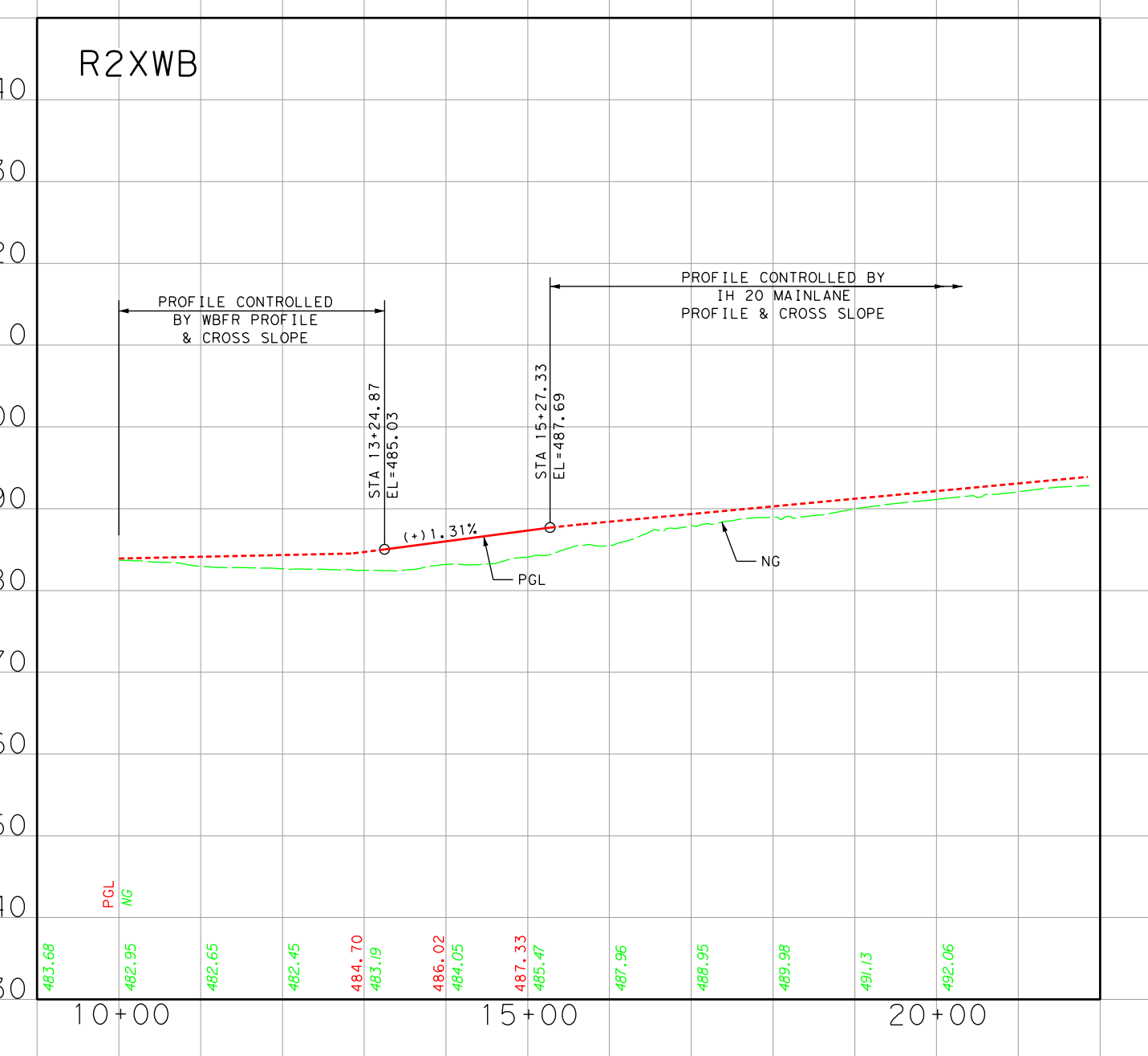
R4NEB TRANSITION

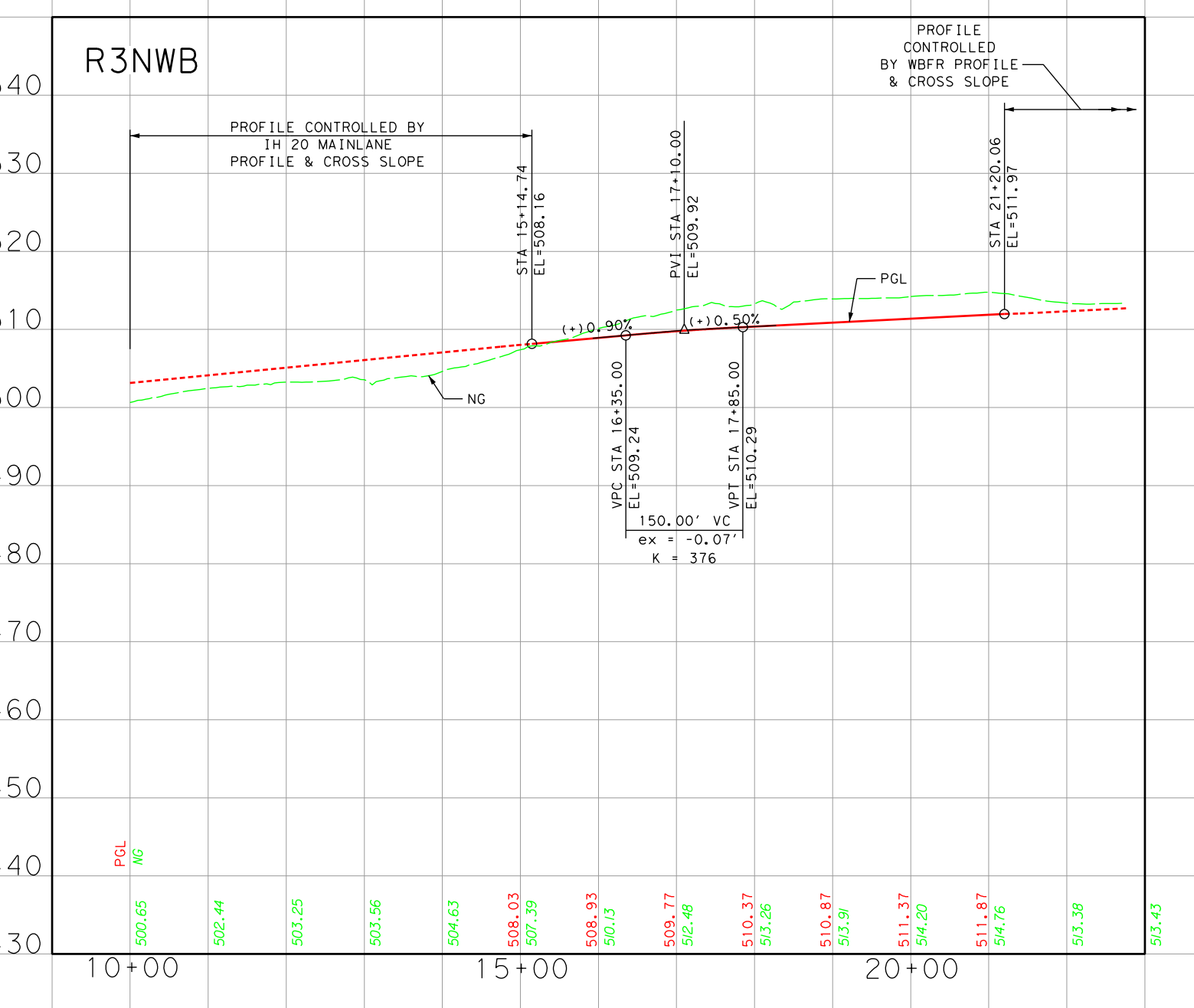
STATION	TEMPLATE
13+01	BL R4NEB +2.50%
16+54	BL R4NEB +2.50%
16+68	BL R4NEB +3.00%

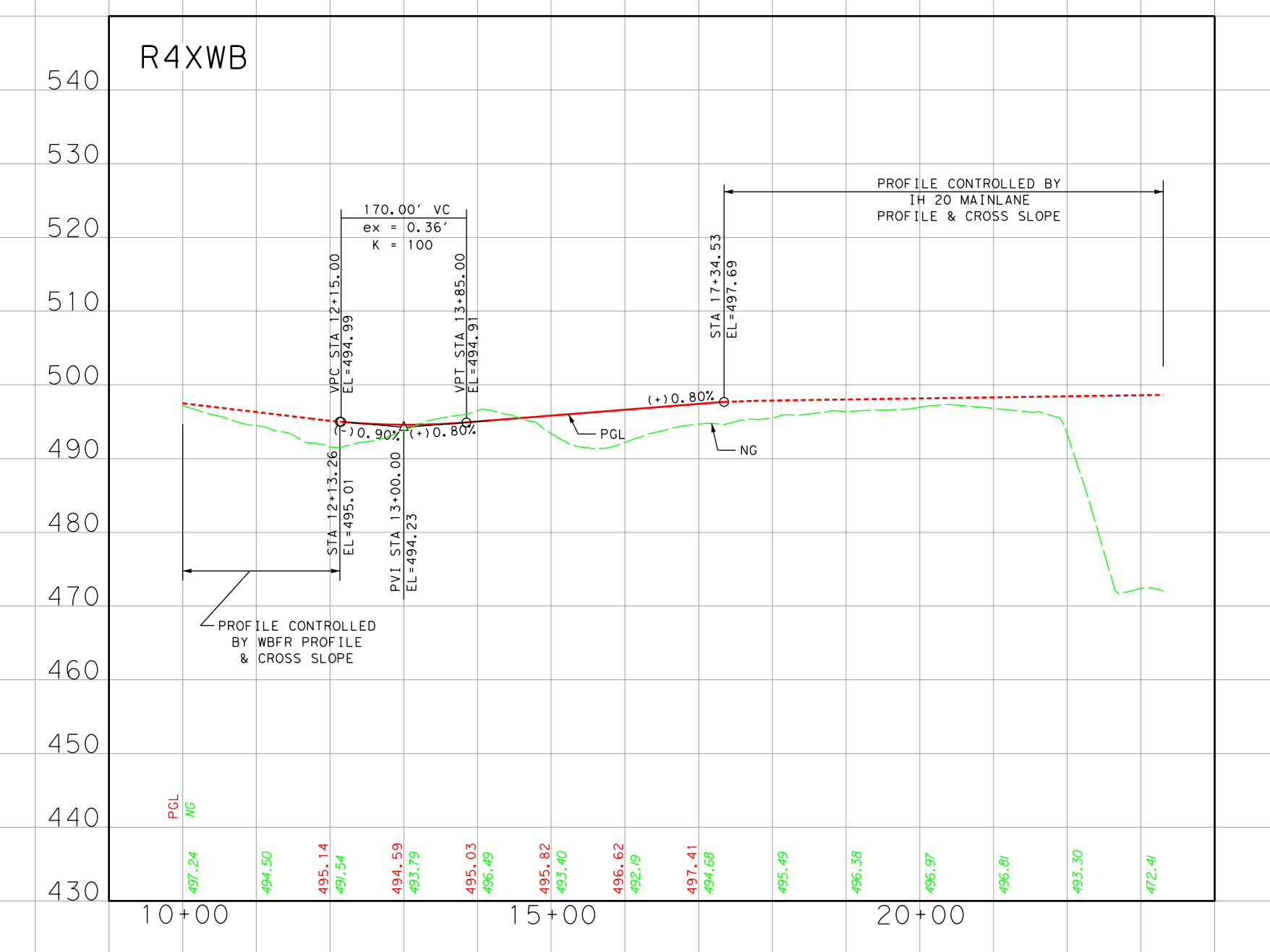

WEST CHASE DRIVE
150.00' VC
ex = 0.74'
K = 38
100.00' VC
ex = -0.58'
K = 21
BEGIN CONSTRUCTION
END CONSTRUCTION
PGL
NG
10+00

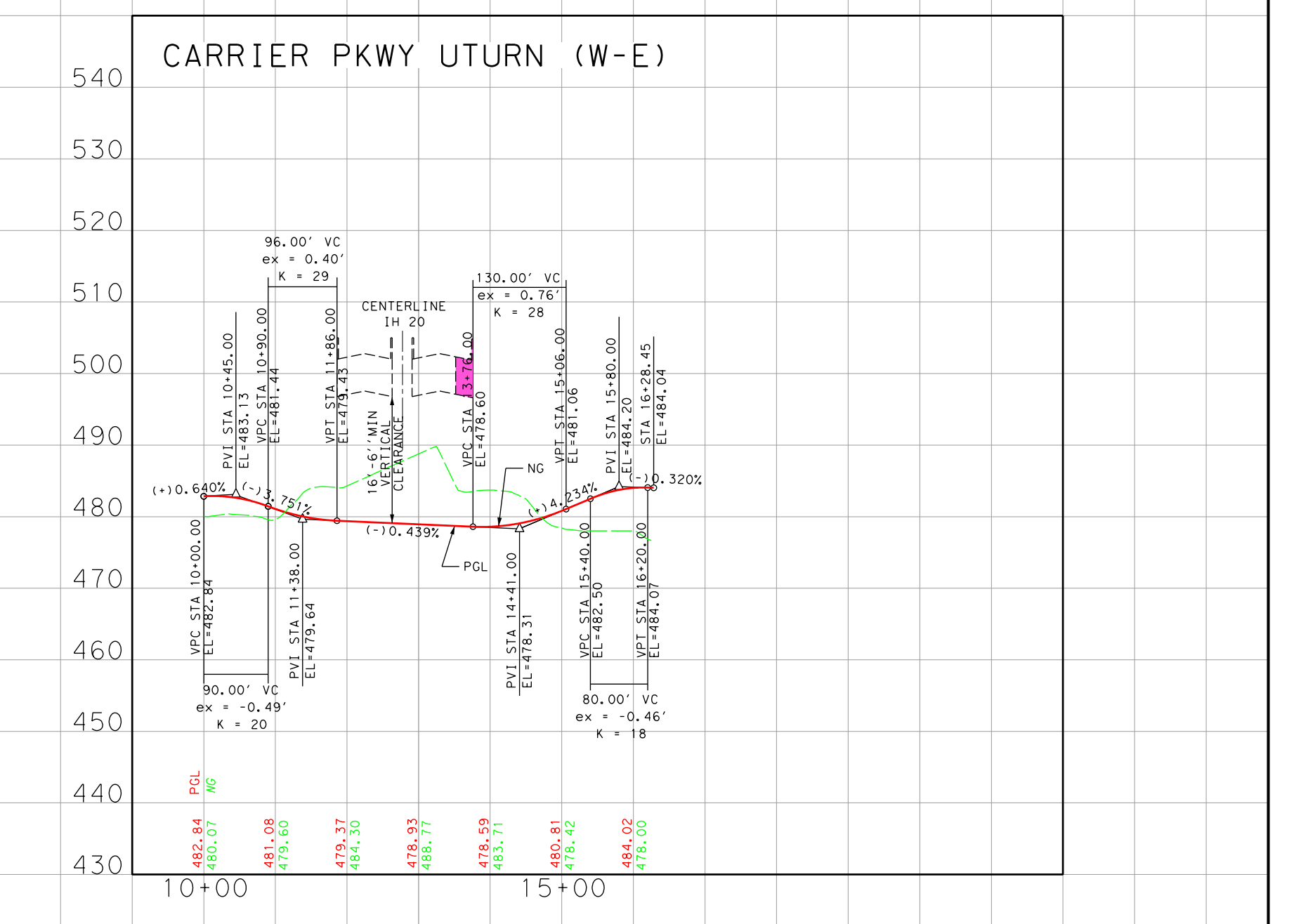

CARRIER PARKWAY
STA 13+77.40
CARRIER PKWY
STA 89+65.59
WBFR
STA 20+14.65
CARRIER PKWY
STA 90+03.21
EBFR
120' BRIDGE
(TX28 PCG)
3-40' SPANS
BEGIN BRIDGE
END BRIDGE
CENTERLINE
IH 20
EXIST PAVEMENT
120.00' VC
ex = 0.46'
K = 39
130.00' VC
ex = 0.57'
K = 37
150.00' VC
ex = 0.76'
K = 37
200.00' VC
ex = 1.33'
K = 38
100.00' VC
ex = -0.34'
K = 36
90.00' VC
ex = -0.34'
K = 30
130.00' VC
ex = -1.06'
K = 20
PGL
NG
10+00
15+00
20+00

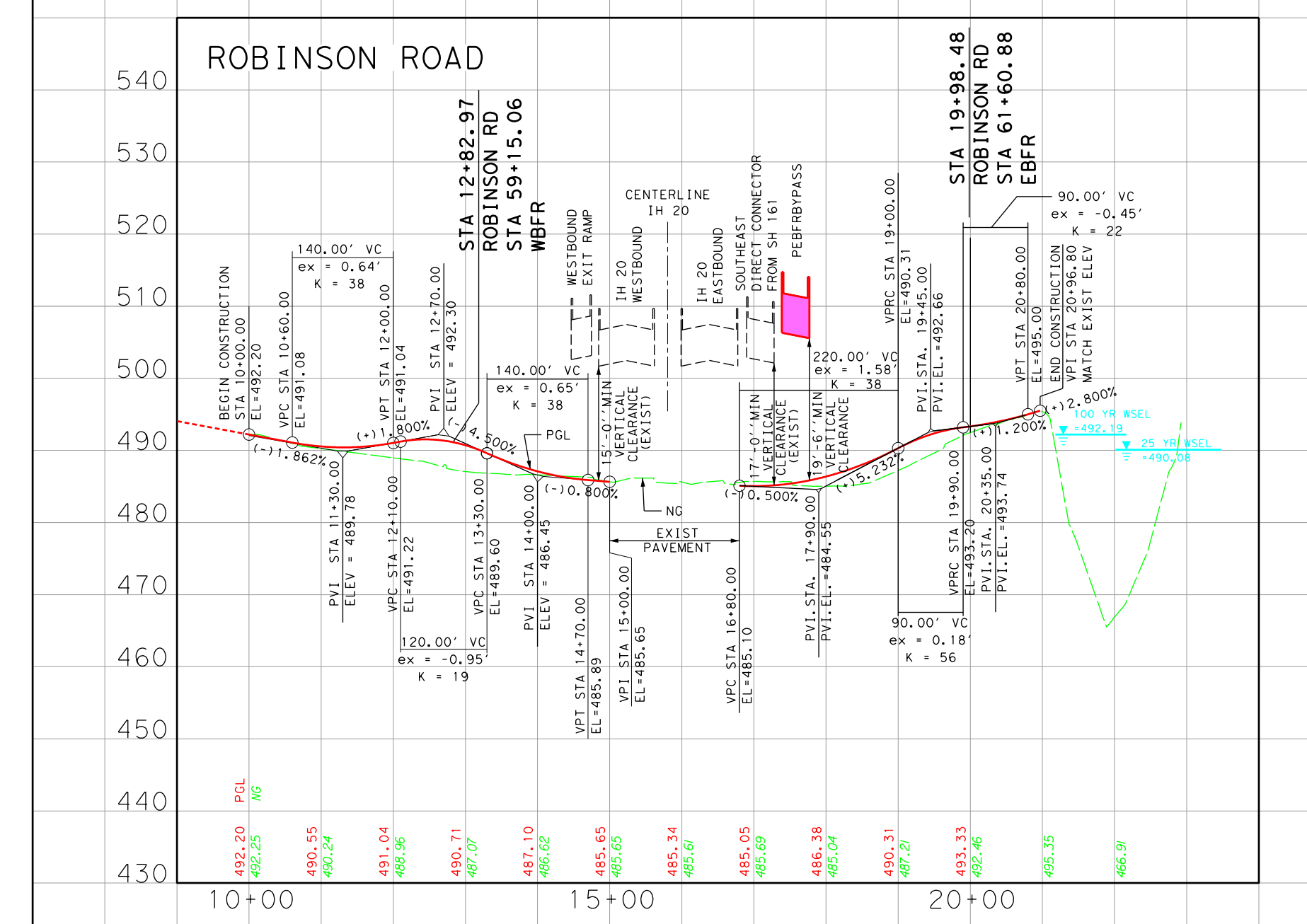

R1NWB
PROFILE CONTROLLED BY
IH 20 MAINLANE
PROFILE & CROSS SLOPE
PROFILE CONTROLLED
BY WBFR PROFILE
& CROSS SLOPE
170.00' VC
ex = 0.43'
K = 84
150.00' VC
ex = -0.37'
K = 77
PGL
NG
10+00
15+00

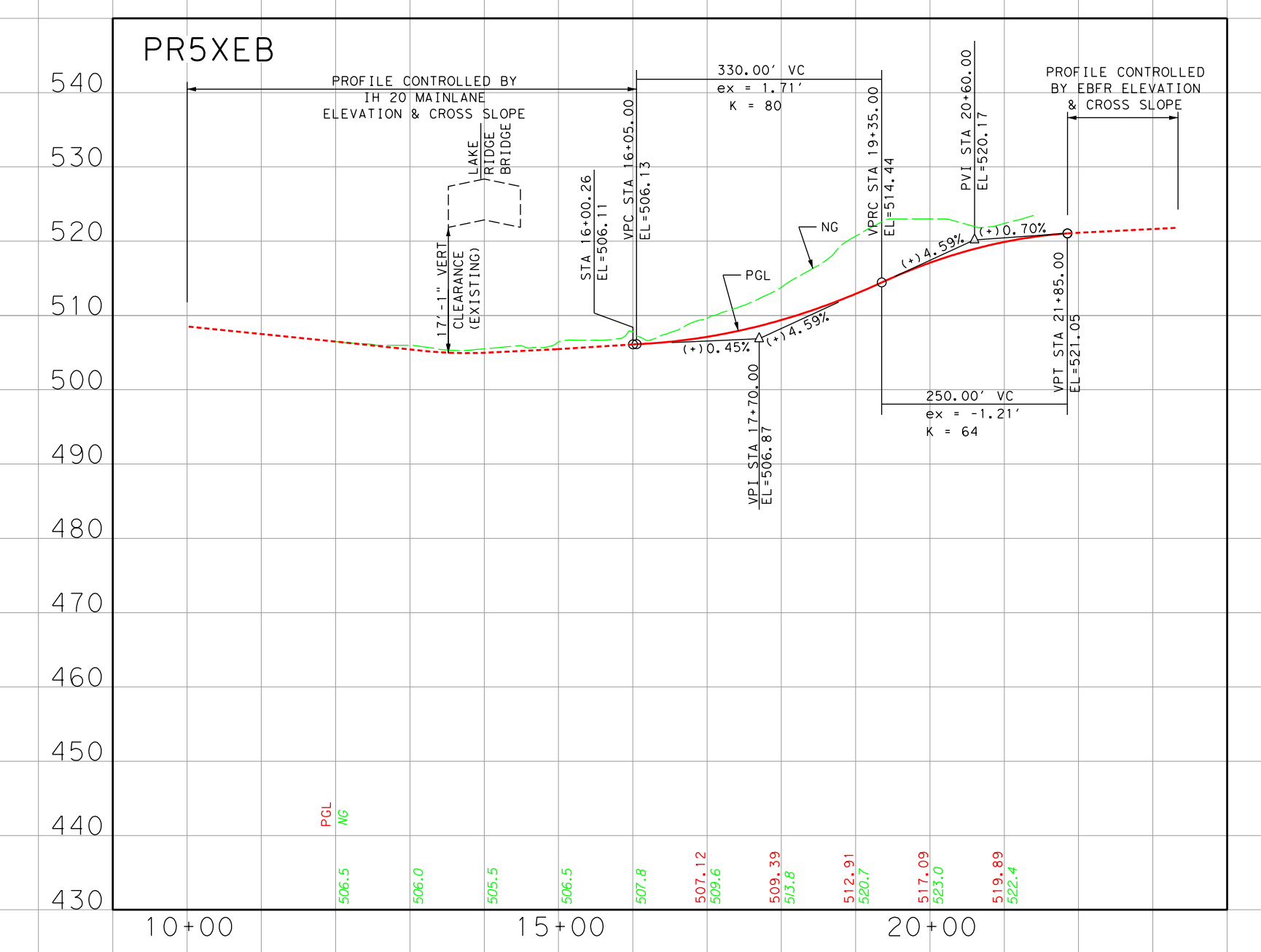

R2XWB
PROFILE CONTROLLED
BY WBFR PROFILE
& CROSS SLOPE
PROFILE CONTROLLED BY
IH 20 MAINLANE
PROFILE & CROSS SLOPE
PGL
NG
10+00
15+00
20+00

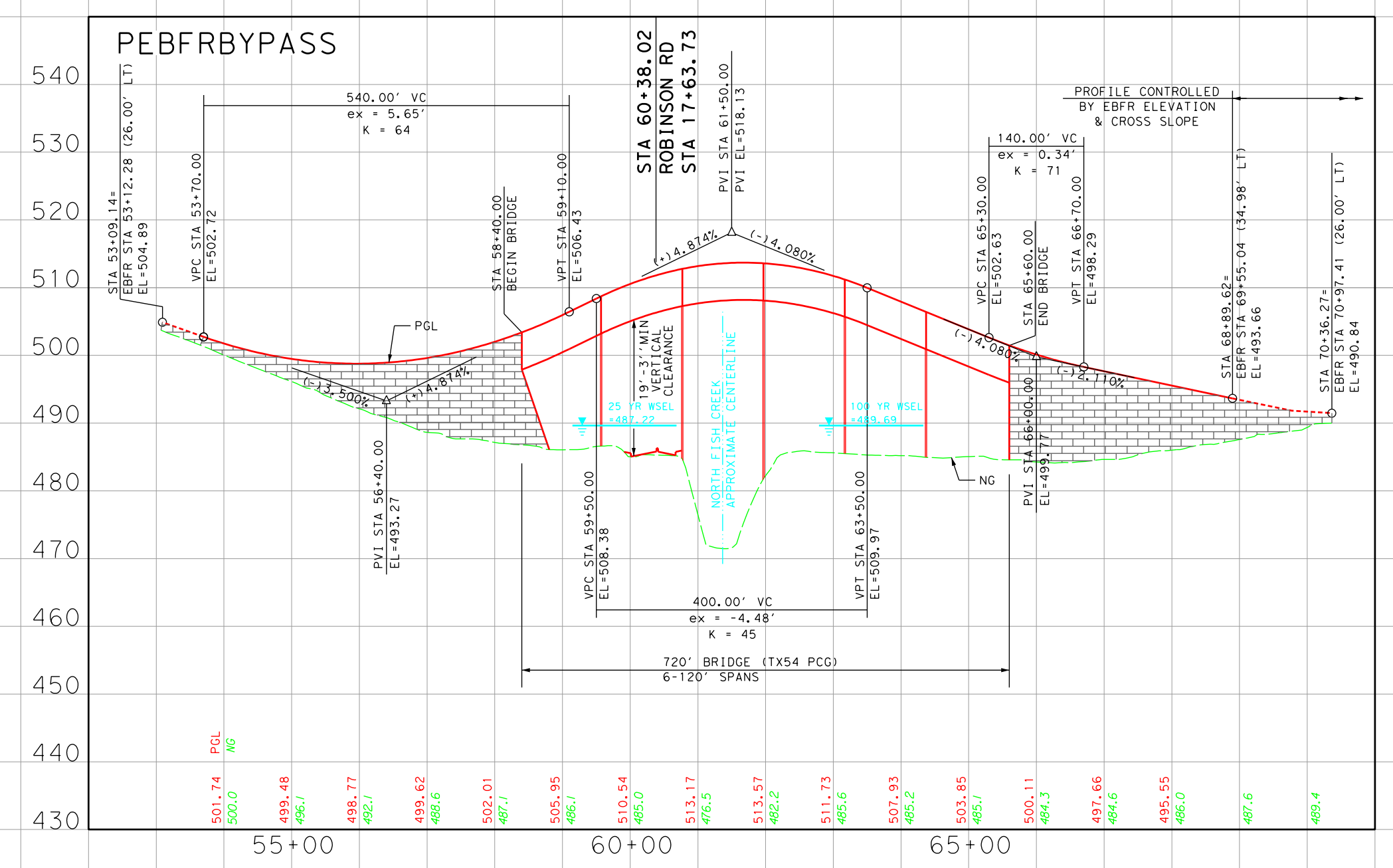

R3NWB
PROFILE CONTROLLED BY
IH 20 MAINLANE
PROFILE & CROSS SLOPE
PROFILE
CONTROLLED
BY WBFR PROFILE
& CROSS SLOPE
150.00' VC
ex = -0.07'
K = 376
PGL
NG
10+00
15+00
20+00

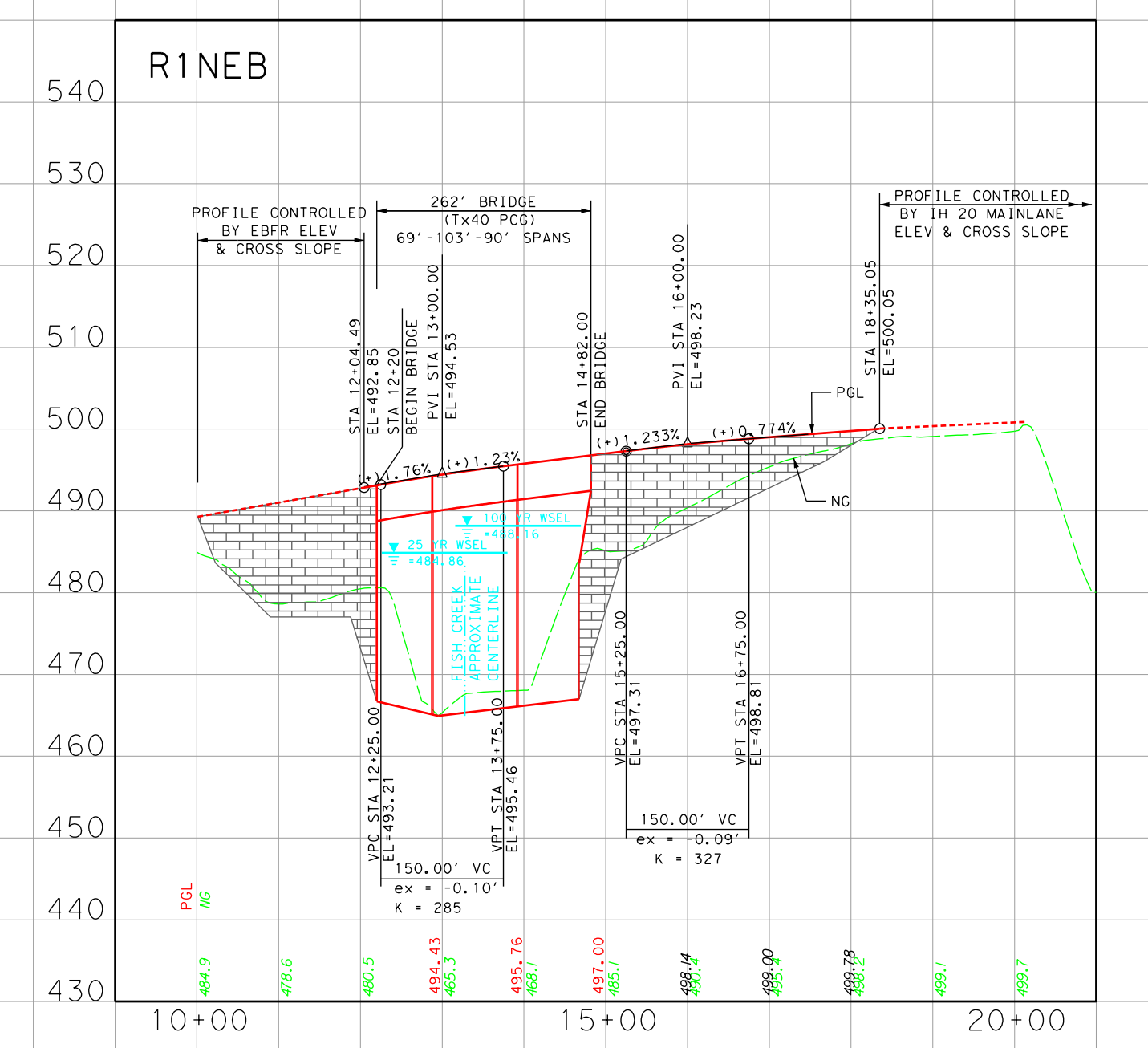

R4XWB
170.00' VC
ex = 0.36'
K = 100
PROFILE CONTROLLED BY
IH 20 MAINLANE
PROFILE & CROSS SLOPE
PROFILE CONTROLLED
BY WBFR PROFILE
& CROSS SLOPE
PGL
NG
10+00
15+00
20+00

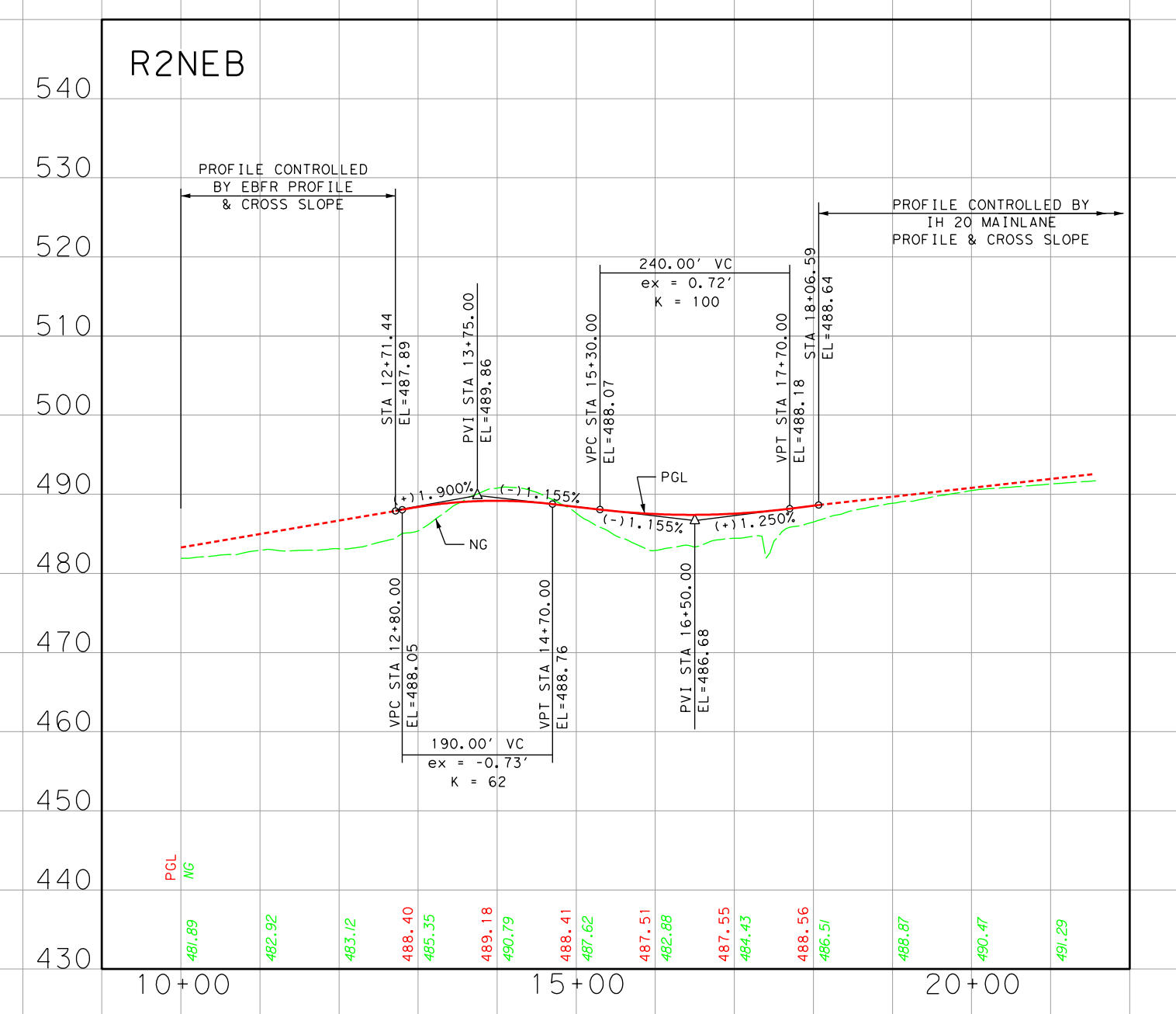

CARRIER PKWY UTURN (W-E)
96.00' VC
ex = 0.40'
K = 29
CENTERLINE
IH 20
130.00' VC
ex = 0.76'
K = 28
90.00' VC
ex = -0.49'
K = 20
80.00' VC
ex = -0.46'
K = 18
PGL
NG
10+00
15+00

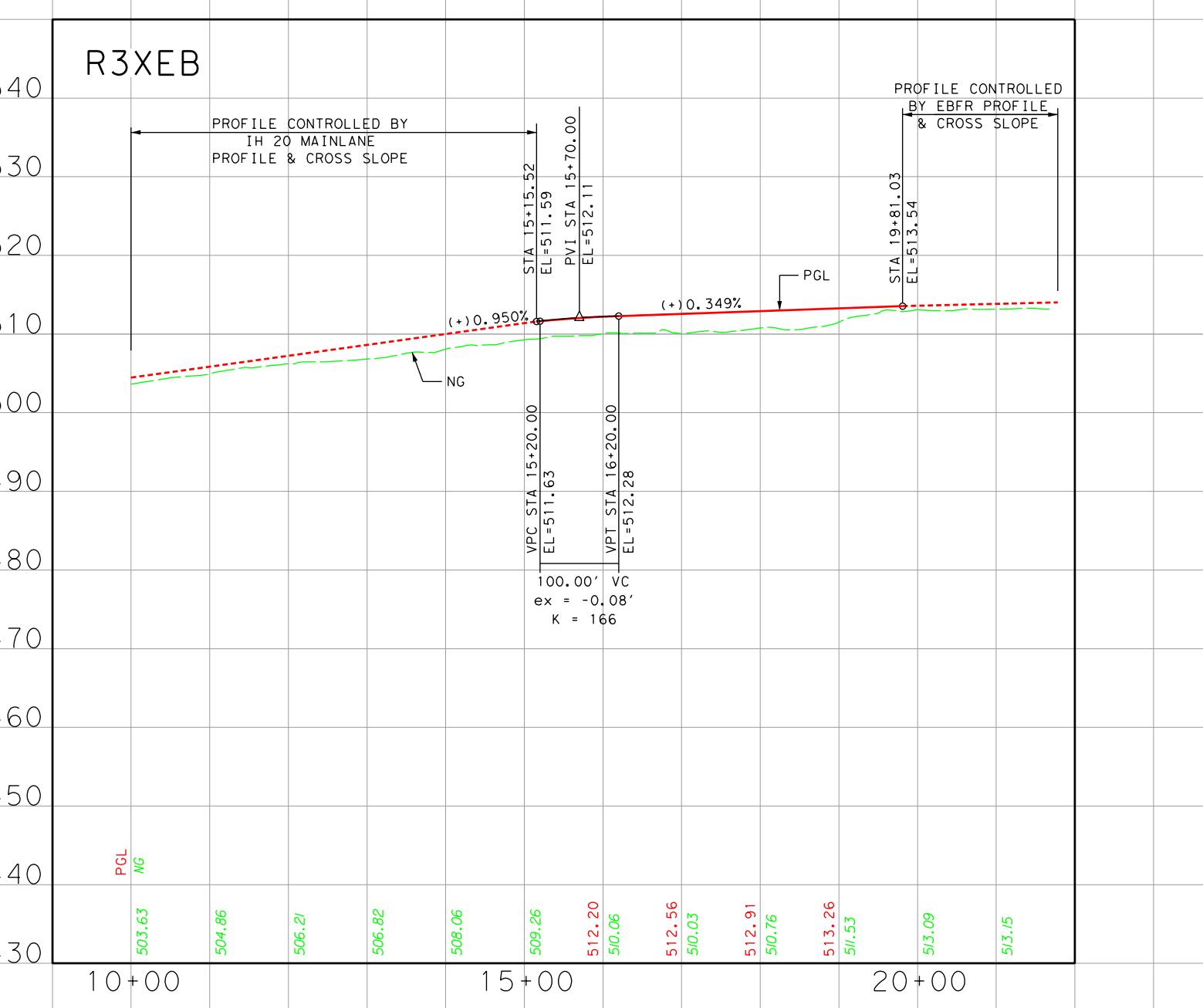

ROBINSON ROAD
STA 12+82.97
ROBINSON RD
STA 59+15.06
WBFR
STA 19+98.48
ROBINSON RD
STA 61+60.88
EBFR
CENTERLINE
IH 20
WESTBOUND EXIT RAMP
IH 20 WESTBOUND
IH 20 EASTBOUND
SOUTHEAST DIRECT CONNECTOR (TO NB SH 161)
PEBFRBYPASS
EXIST PAVEMENT
140.00' VC
ex = 0.64'
K = 38
140.00' VC
ex = 0.65'
K = 38
220.00' VC
ex = 1.58'
K = 38
90.00' VC
ex = -0.45'
K = 22
120.00' VC
ex = -0.95'
K = 19
90.00' VC
ex = 0.18'
K = 56
BEGIN CONSTRUCTION
END CONSTRUCTION
MATCH EXIST ELEV
PGL
NG
10+00
15+00
20+00

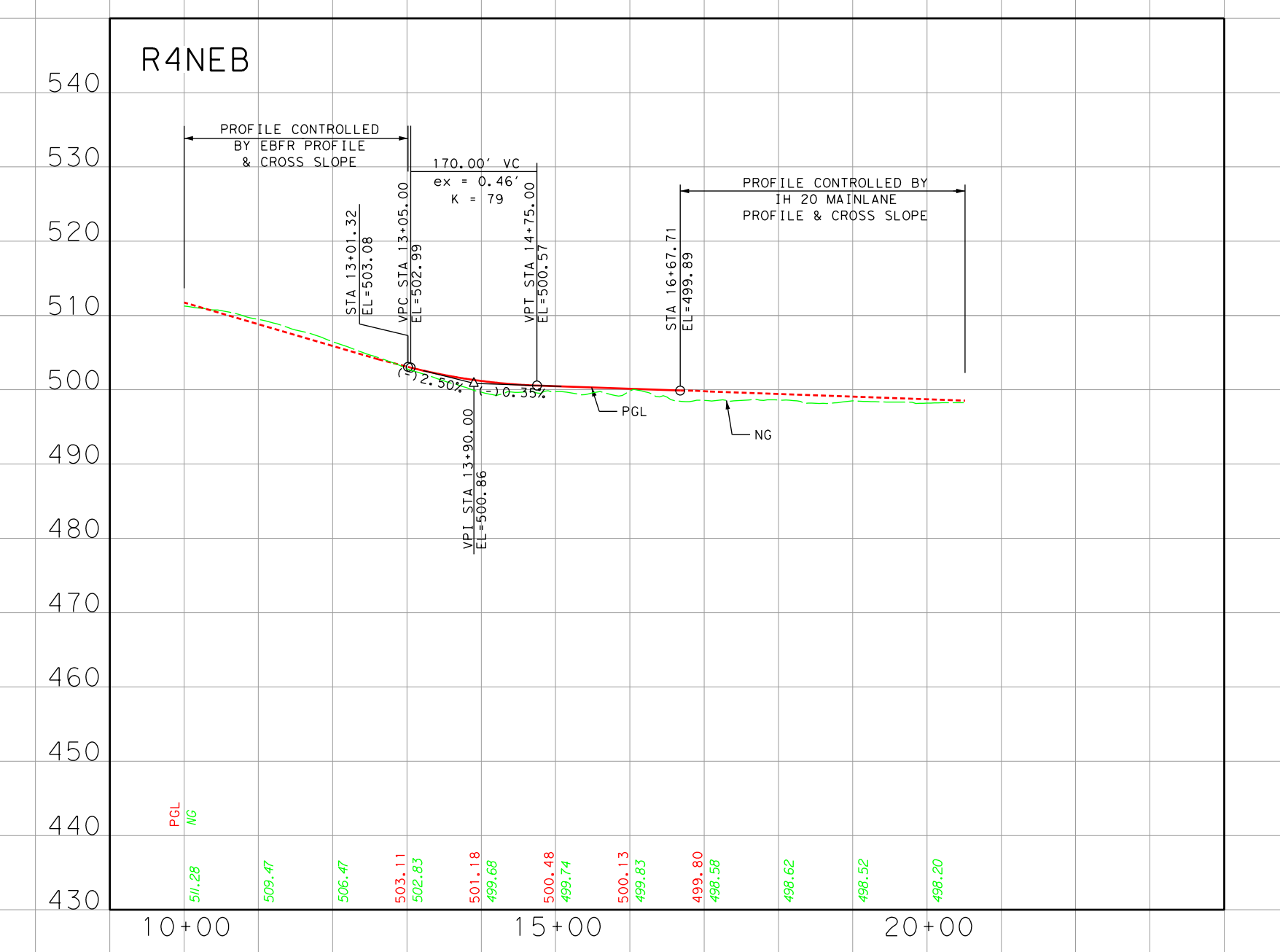

PR5XEB
PROFILE CONTROLLED BY
IH 20 MAINLANE
ELEVATION & CROSS SLOPE
PROFILE CONTROLLED
BY EBFR ELEVATION
& CROSS SLOPE
330.00' VC
ex = 1.71'
K = 80
250.00' VC
ex = -1.21'
K = 64
LAKE BRIDGE
VERT CLEARANCE (EXISTING)
PGL
NG
10+00
15+00
20+00

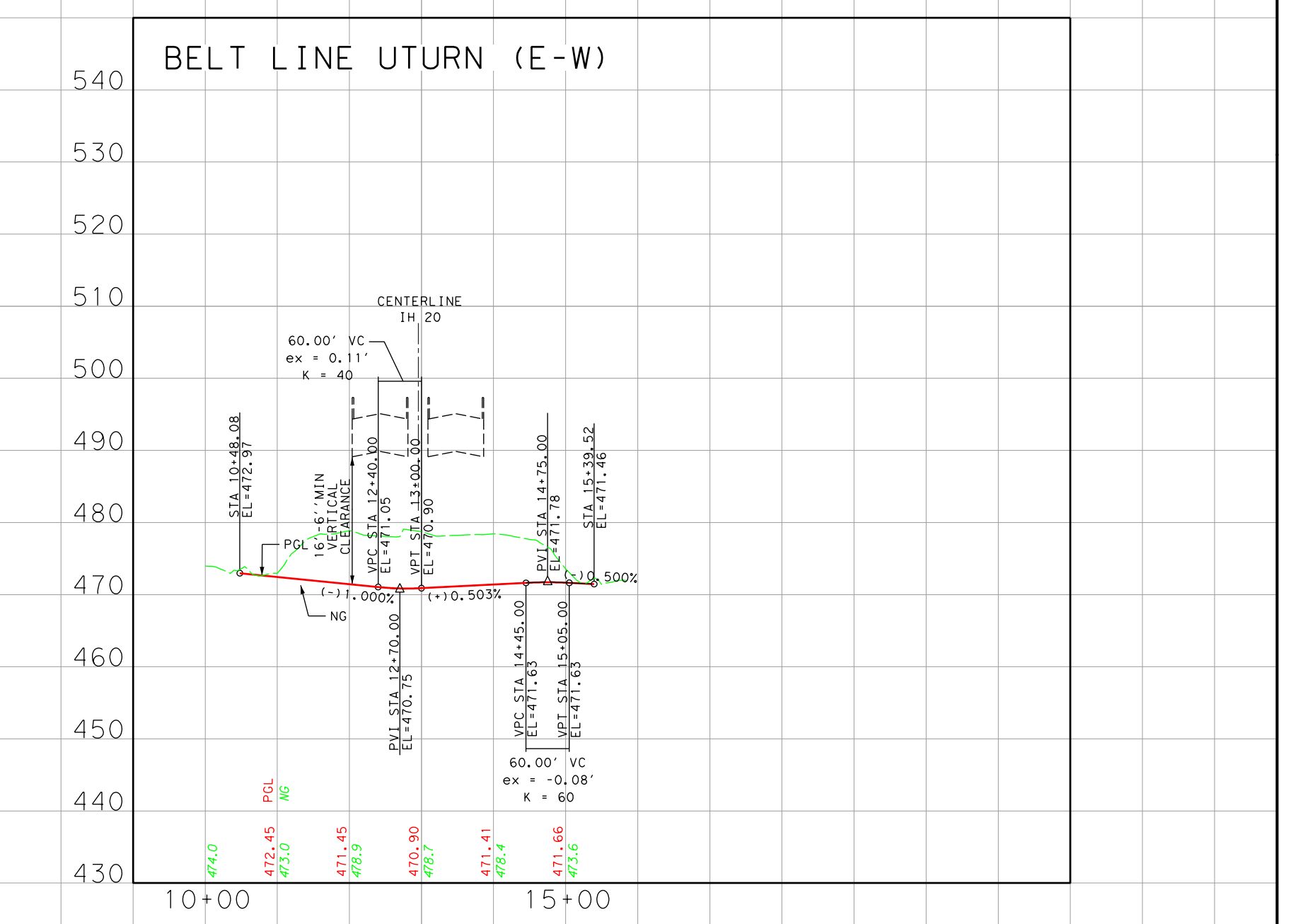

PEBFRBYPASS
STA 60+38.02
ROBINSON RD
STA 17+63.73
540.00' VC
ex = 5.65'
K = 64
140.00' VC
ex = 0.34'
K = 71
PROFILE CONTROLLED
BY EBFR ELEVATION
& CROSS SLOPE
BEGIN BRIDGE
END BRIDGE
400.00' VC
ex = -4.48'
K = 45
720' BRIDGE (TX54 PCG)
6-120' SPANS
PGL
NG
55+00
60+00
65+00


R1NEB
PROFILE CONTROLLED
BY EBFR ELEV
& CROSS SLOPE
262' BRIDGE
(TX40 PCG)
69'-103'-90' SPANS
BEGIN BRIDGE
END BRIDGE
PROFILE CONTROLLED
BY IH 20 MAINLANE
ELEV & CROSS SLOPE
150.00' VC
ex = -0.10'
K = 285
150.00' VC
ex = -0.09'
K = 327
PGL
NG
10+00
15+00
20+00


R2NEB
PROFILE CONTROLLED
BY EBFR PROFILE
& CROSS SLOPE
PROFILE CONTROLLED BY
IH 20 MAINLANE
PROFILE & CROSS SLOPE
240.00' VC
ex = 0.72'
K = 100
190.00' VC
ex = -0.73'
K = 62
PGL
NG
10+00
15+00
20+00

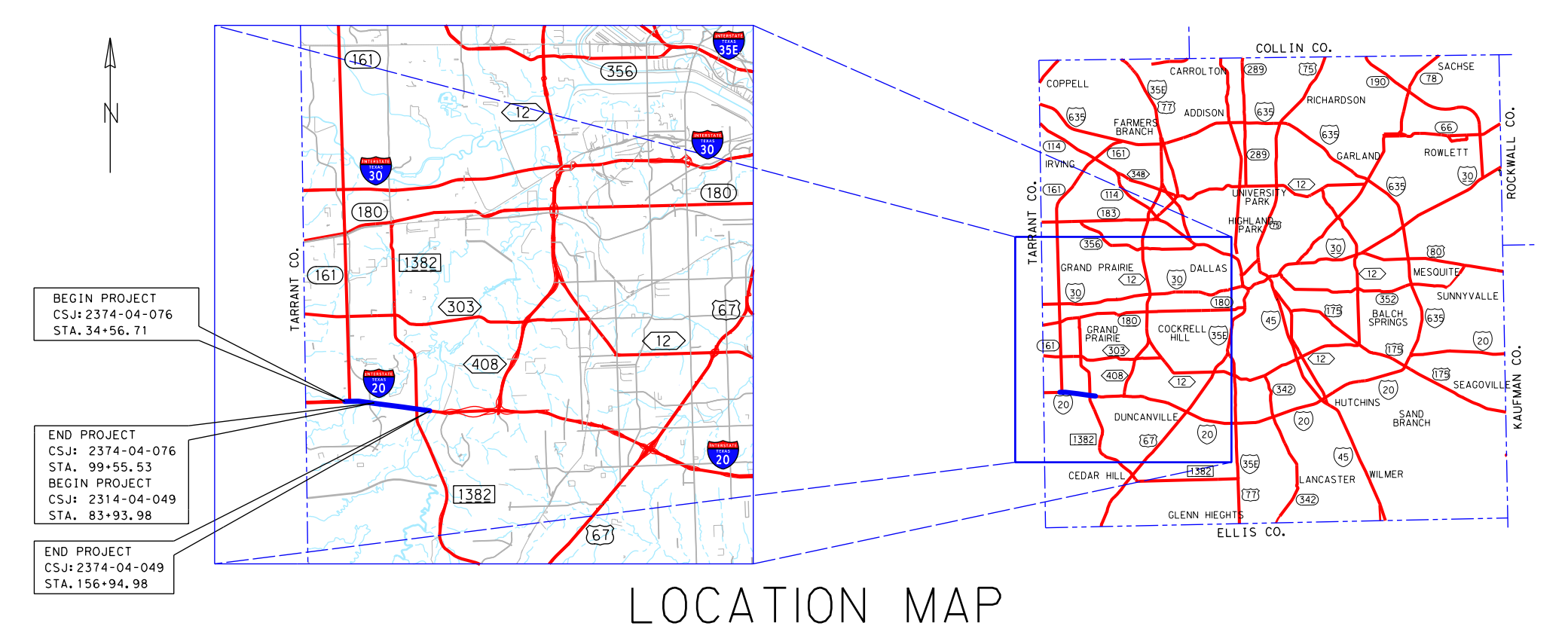

R3XEB
PROFILE CONTROLLED BY
IH 20 MAINLANE
PROFILE & CROSS SLOPE
PROFILE CONTROLLED
BY EBFR PROFILE
& CROSS SLOPE
100.00' VC
ex = -0.08'
K = 166
PGL
NG
10+00
15+00
20+00


R4NEB
PROFILE CONTROLLED
BY EBFR PROFILE
& CROSS SLOPE
170.00' VC
ex = 0.46'
K = 79
PROFILE CONTROLLED BY
IH 20 MAINLANE
PROFILE & CROSS SLOPE
PGL
NG
10+00
15+00
20+00


BELT LINE UTURN (E-W)
CENTERLINE
IH 20
60.00' VC
ex = 0.11'
K = 40
16'-6" MIN VERTICAL CLEARANCE
60.00' VC
ex = -0.08'
K = 60
PGL
NG
10+00
15+00

Texas Department of Transportation®

DALLAS DISTRICT
DESIGN SCHEMATIC
KELLY SELMAN, P.E., DISTRICT ENGINEER
DALLAS COUNTY
INTERSTATE HIGHWAY 20 FRONTAGE ROADS
PROJECT LIMIT: FROM SH 161 TO
FM 1382 (BELT LINE ROAD)
CONTROL: 2374-04-049 & 2374-04-076
FUNCTIONAL CLASS: INTERSTATE
DESIGN SPEED: 70 mph MAINLANES
40 mph FRONTAGE ROADS
45 mph RAMPS
30 mph CROSS STREETS
PROJECT LENGTH = 2.318 MI.



LOCATION MAP
NOT TO SCALE

MARCH 09, 2015
SCALE: 1"=200' H, 1"=20'V
ROLL 2 OF 3

PRELIMINARY
FOR INTERIM REVIEW ONLY

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT INTENDED FOR REGULATORY APPROVAL, PERMIT, BIDDING OR CONSTRUCTION PURPOSES. THEY WERE PREPARED BY OR UNDER THE SUPERVISION OF:

MATTHEW G. CRAIG 69910 3-09-15
NAME P.E. NO. DATE
THUC Q. PHAM 91115 3-09-15
NAME P.E. NO. DATE

HALFF ASSOCIATES, INC.
TBPE FIRM #F-312

HALFF
1201 NORTH BOWSER ROAD
RICHARDSON, TEXAS 75081-2275
TEL (214) 346-6200

© 2015 BY Texas Department of Transportation all rights reserved