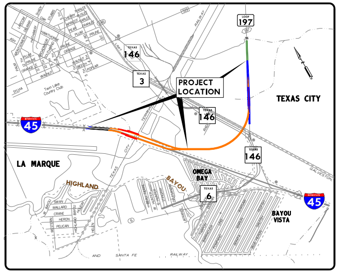

197
146
3
PROJECT LOCATION
146
TEXAS CITY
45
146
LA MARQUE
HIGHLAND
BAYOU
OMEGA BAY
6
45
BAYOU VISTA
AND SANTA FE RAILWAY

VICINITY MAP

NTS

SCHEMATIC LAYOUT
GALVESTON COUNTY
LOOP 197/IH 45 CONNECTOR

FROM: IH 45

TO: LOOP 197

Texas Department of Transportation

DATE: JULY 2005
APPROVED: JUNE 25, 2007

CSJ: 0500-04-112

HOUSTON DISTRICT

NOT A BIDDING DOCUMENT

WEIXIONG ZHAO
87094

The seal appearing on this document was authorized by WEIXIONG ZHAO P.E. 87094, on
JULY 29, 2005

LEGEND

SYMBOLOGY		LINE WT	COLOR CODE	
MAIN LANES	▬	5	BLACK	0
FRONTAGE ROADS AND RAMPS	—	1	BLUE	1
TURNAROUNDS	—	1	BLUE	1
EXISTING RDWY TO BE REMOVED	▰ ▰	0	BLACK	0
EXISTING RDWY TO REMAIN	—	2	GREEN	2
EMBANKMENT	—△—△—	3	RED	3
PROP ROW & ACCESS DENIAL	——‖——	3	RED	3
PROP ROW	—·—·—	5	BLACK	0
EXISTING ROW	– – – –	0	BLACK	0
ACCESS ROAD	········	1	BLUE	1
PLANIMETRIC	▢	2	GREEN	2
TRAFFIC PROJECTION YEAR (2025) DHV	(000000)	0	BLACK	0
EXISTING LANE DIRECTIONAL INDICATOR	⇨	1	BLACK	0
PROPOSED LANE DIRECTIONAL INDICATOR	➡	0	BLACK	0
DIRECT CONNECTOR	—	4	ORANGE	6
DEPRESSED	—∧—∧—	3	RED	3
FUTURE	- - - -	1	BLUE	1
RETAINING WALL	▬	6	RED	3
STRIPING	▰ ▰	0	ORANGE	6
HIGH OCCUPANCY VEHICLE	ØL	5	TURQUOISE	65
OVERHEAD EXPRESSWAY LANES	ØL	9	BROWN	7
TEMPORARY CONNECTIONS	▬	10	PURPLE	37
RDWY. UNDER CONSTRUCTION	—	5	LT GREEN	197
RECOMMENDED NOISE ABATEMENT WALL	▬	10	PURPLE	203

FILE NAME:
143LP_SCHEM.DGN

REFERENCE FILES:

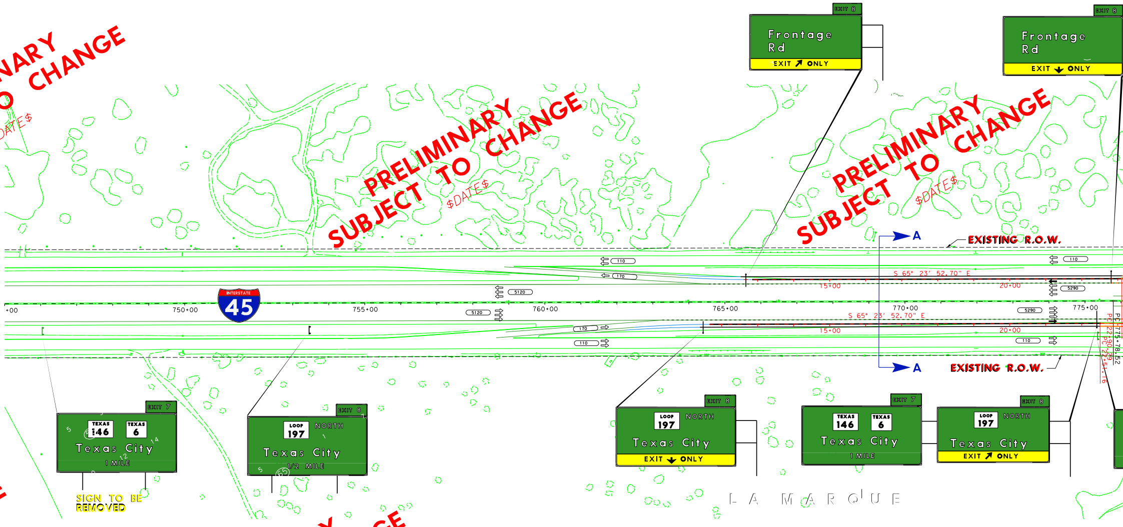
00143_TOPO.DGN	LEFT SIDE.HMR
00143_ROW.DGN	MIDDLE.HMR
143LPALGN.DGN	RIGHT SIDE_NEW.HMR
143LPPLAN.DGN	INSERT2.HMR
143LPPRF.DGN	
00143TYP.DGN	
00143_PROPLINES.DGN	
143L_BDR_SCHE.DGN	

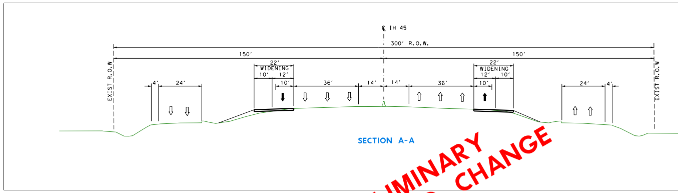
DESIGN SPEED

IH 45	70 MPH
Loop197	60 MPH
Direct Connector	50 MPH

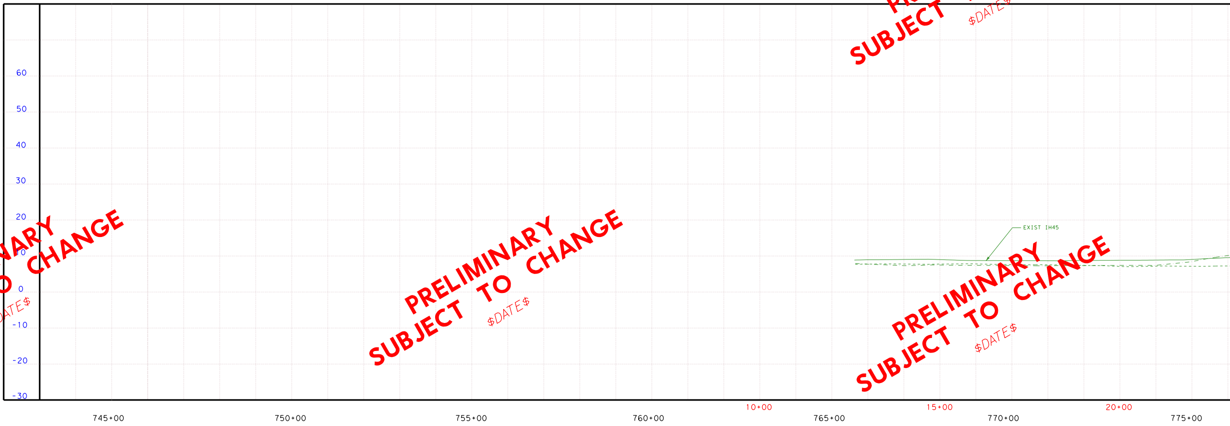
100 50 0 50 100
SCALE IN FEET

S&B INFRASTRUCTURE, LTD.
Engineering Management Technology

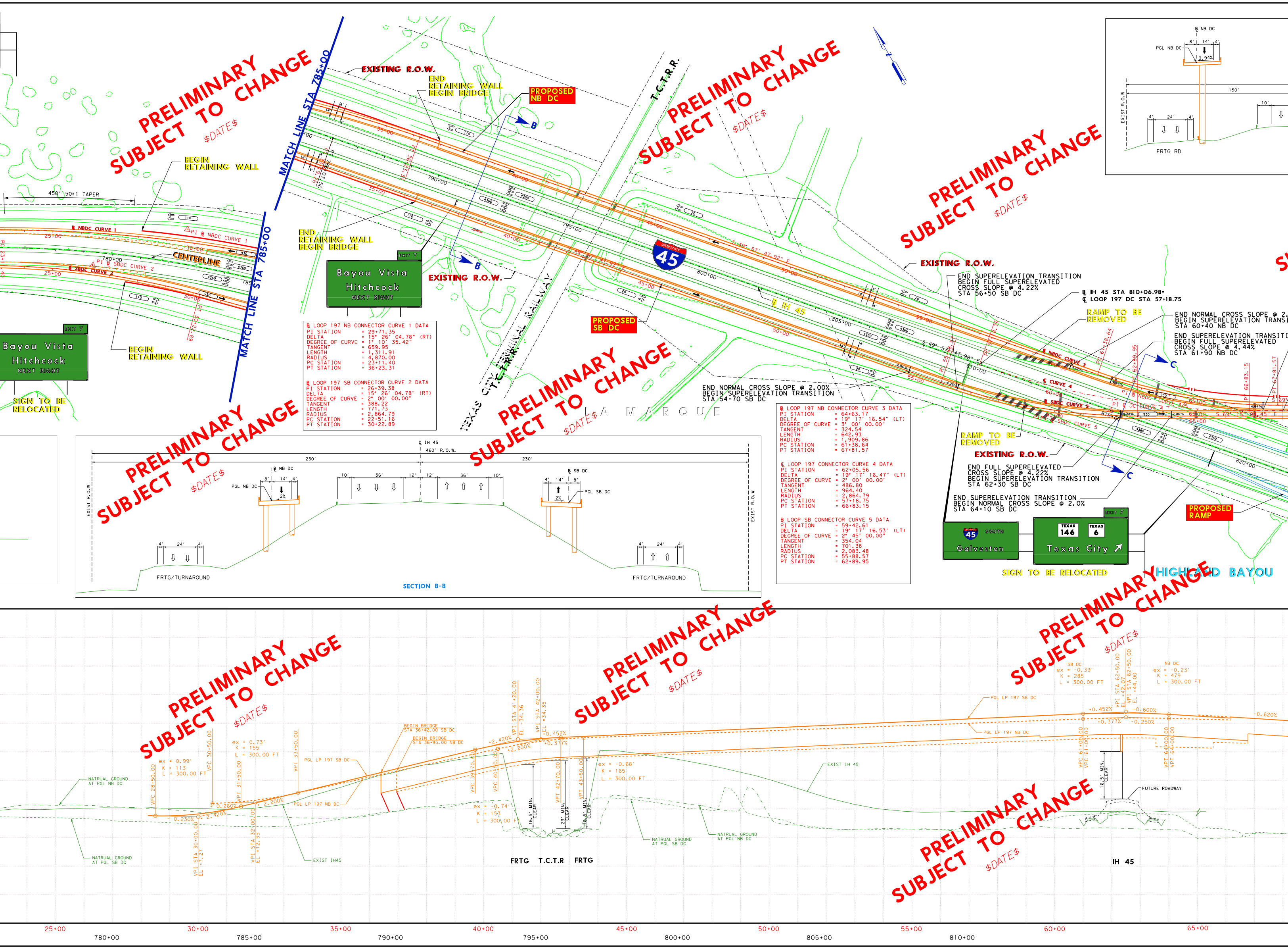

EXIT 8
Frontage Rd
EXIT ONLY
EXIT 8
Frontage Rd
EXIT ONLY
A
EXISTING R.O.W.
S 65° 23' 52.70" E
15+00
20+00
770+00
775+00
750+00
755+00
760+00
765+00
45
INTERSTATE
5120
5290
170
110
A
EXISTING R.O.W.
EXIT 7
TEXAS 146
TEXAS 6
Texas City
1 MILE
SIGN TO BE REMOVED
EXIT 8
LOOP 197 NORTH
Texas City
1/2 MILE
EXIT 8
LOOP 197 NORTH
Texas City
EXIT ONLY
EXIT 7
TEXAS 146
TEXAS 6
Texas City
1 MILE
EXIT 8
LOOP 197 NORTH
Texas City
EXIT ONLY
LA MARQUE


℄ IH 45
300' R.O.W.
150'
150'
EXIST R.O.W.
EXIST R.O.W.
4'
24'
22' WIDENING
10' 12'
10'
36'
14'
14'
36'
22' WIDENING
12' 10'
10'
24'
4'

SECTION A-A


60
50
40
30
20
10
0
-10
-20
-30
EXIST IH45
745+00
750+00
755+00
760+00
10+00
765+00
15+00
770+00
20+00
775+00

PRELIMINARY SUBJECT TO CHANGE $DATE$


EXISTING R.O.W.
END RETAINING WALL BEGIN BRIDGE
PROPOSED NB DC
BEGIN RETAINING WALL
450' 50:1 TAPER
MATCH LINE STA 785+00
℄ NBDC CURVE 1
PI ℄ NBDC CURVE 1
CENTERLINE
PI ℄ SBDC CURVE 2
℄ SBDC CURVE 2
EXIT 7
Bayou Vista
Hitchcock
NEXT RIGHT
SIGN TO BE RELOCATED
T.C.T.R.R.
TEXAS CITY TERMINAL RAILWAY
PROPOSED SB DC
℄ IH 45
S 49° 57' 47.98" E
LA MARQUE
END SUPERELEVATION TRANSITION
BEGIN FULL SUPERELEVATED
CROSS SLOPE @ 4.22%
STA 56+50 SB DC
℄ IH 45 STA 810+06.98=
℄ LOOP 197 DC STA 57+18.75
RAMP TO BE REMOVED
END NORMAL CROSS SLOPE @ 2.
BEGIN SUPERELEVATION TRANSI
STA 60+40 NB DC
END SUPERELEVATION TRANSITI
BEGIN FULL SUPERELEVATED
CROSS SLOPE @ 4.44%
STA 61+90 NB DC
END NORMAL CROSS SLOPE @ 2.00%
BEGIN SUPERELEVATION TRANSITION
STA 54+70 SB DC
℄ NBDC CURVE 3
℄ CURVE 4
℄ SBDC CURVE 5
RAMP TO BE REMOVED
EXISTING R.O.W.
END FULL SUPERELEVATED
CROSS SLOPE @ 4.22%
BEGIN SUPERELEVATION TRANSITION
STA 62+30 SB DC
END SUPERELEVATION TRANSITION
BEGIN NORMAL CROSS SLOPE @ 2.0%
STA 64+10 SB DC
PROPOSED RAMP
45 SOUTH
Galveston
EXIT 7
TEXAS 146
TEXAS 6
Texas City
SIGN TO BE RELOCATED
HIGHLAND BAYOU
℄ NB DC
PGL NB DC
FRTG RD
EXIST R.O.W
150'
℄ IH 45
460' R.O.W.
230'
230'
PGL NB DC
PGL SB DC
FRTG/TURNAROUND
FRTG/TURNAROUND
SECTION B-B
PGL LP 197 SB DC
PGL LP 197 NB DC
NATRUAL GROUND AT PGL NB DC
NATRUAL GROUND AT PGL SB DC
EXIST IH45
EXIST IH 45
16.5' MIN. CLEAR
23' MIN. CLEAR
FUTURE ROADWAY
FRTG
T.C.T.R
FRTG
IH 45
25+00
780+00
30+00
785+00
35+00
790+00
40+00
795+00
45+00
800+00
50+00
805+00
55+00
810+00
60+00
65+00

℄ LOOP 197 NB CONNECTOR CURVE 1 DATA

PI STATION	= 29+71.35
DELTA	= 15° 26' 04.78" (RT)
DEGREE OF CURVE	= 1° 10' 35.42"
TANGENT	= 659.95
LENGTH	= 1,311.91
RADIUS	= 4,870.00
PC STATION	= 23+11.40
PT STATION	= 36+23.31

℄ LOOP 197 SB CONNECTOR CURVE 2 DATA

PI STATION	= 26+39.38
DELTA	= 15° 26' 04.78" (RT)
DEGREE OF CURVE	= 2° 00' 00.00"
TANGENT	= 388.22
LENGTH	= 771.73
RADIUS	= 2,864.79
PC STATION	= 22+51.16
PT STATION	= 30+22.89

℄ LOOP 197 NB CONNECTOR CURVE 3 DATA

PI STATION	= 64+63.17
DELTA	= 19° 17' 16.54" (LT)
DEGREE OF CURVE	= 3° 00' 00.00"
TANGENT	= 324.54
LENGTH	= 642.93
RADIUS	= 1,909.86
PC STATION	= 61+38.64
PT STATION	= 67+81.57

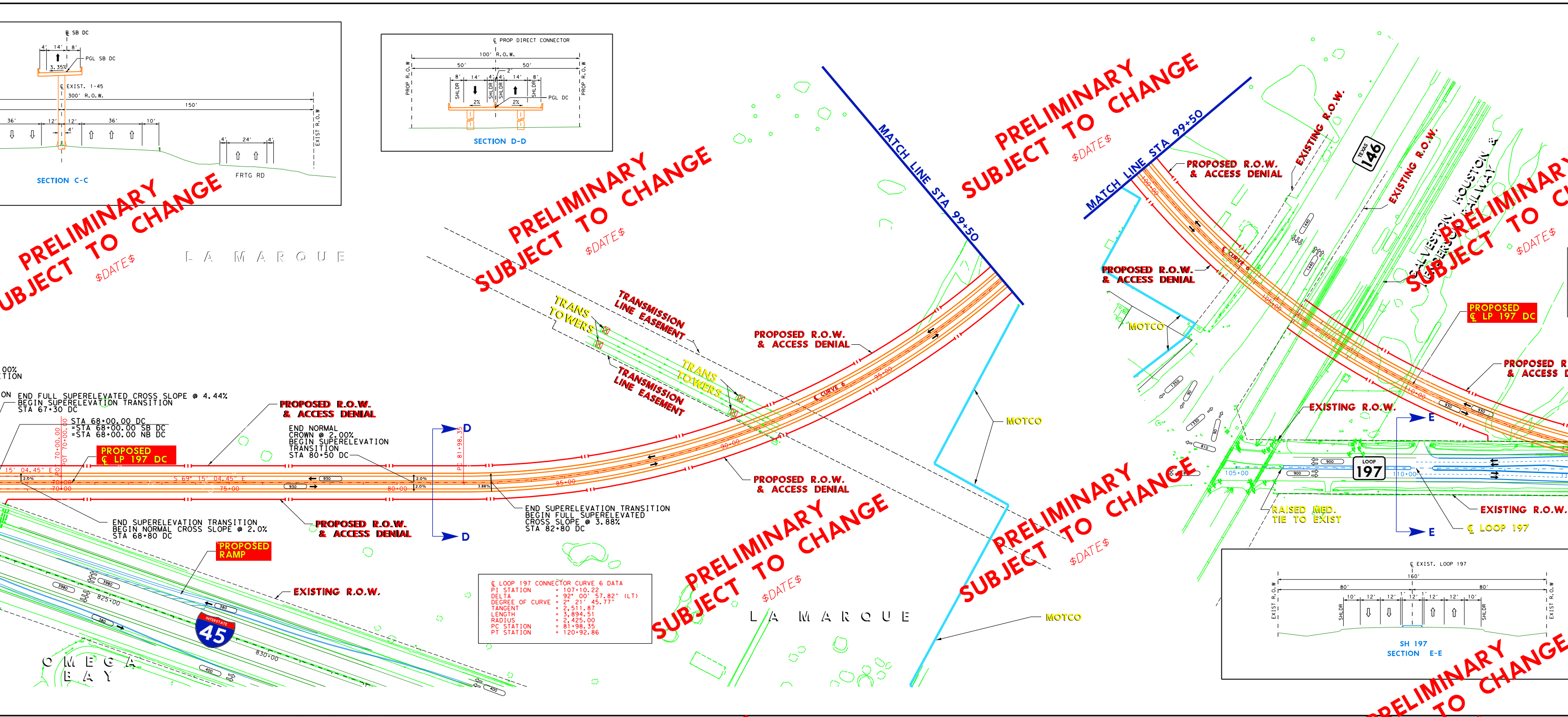
℄ LOOP 197 CONNECTOR CURVE 4 DATA

PI STATION	= 62+05.56
DELTA	= 19° 17' 16.47" (LT)
DEGREE OF CURVE	= 2° 00' 00.00"
TANGENT	= 486.80
LENGTH	= 964.40
RADIUS	= 2,864.79
PC STATION	= 57+18.75
PT STATION	= 66+83.15

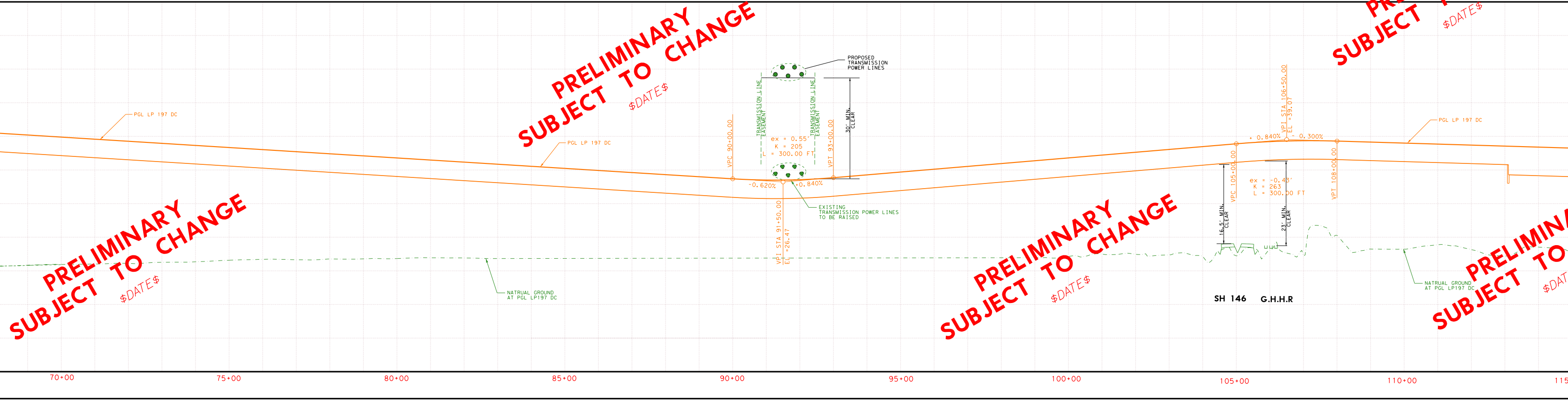
℄ LOOP SB CONNECTOR CURVE 5 DATA

PI STATION	= 59+42.61
DELTA	= 19° 17' 16.53" (LT)
DEGREE OF CURVE	= 2° 45' 00.00"
TANGENT	= 354.04
LENGTH	= 701.38
RADIUS	= 2,083.48
PC STATION	= 55+88.57
PT STATION	= 62+89.95

PRELIMINARY SUBJECT TO CHANGE $DATE$


℄ SB DC
PGL SB DC
3.35%
℄ EXIST. I-45
300' R.O.W.
150'
36'
12'
12'
4'
36'
10'
4'
24'
4'
EXIST R.O.W.
FRTG RD
SECTION C-C
℄ PROP DIRECT CONNECTOR
100' R.O.W.
50'
50'
PROP R.O.W.
PROP R.O.W.
8'
14'
4'
2'
4'
14'
8'
SHLDR
SHLDR
SHLDR
SHLDR
2%
2%
PGL DC
SECTION D-D
L A M A R Q U E
MATCH LINE STA 99+50
MATCH LINE STA 99+50
TRANS TOWERS
TRANSMISSION LINE EASEMENT
TRANS TOWERS
TRANSMISSION LINE EASEMENT
PROPOSED R.O.W. & ACCESS DENIAL
CURVE 6
90+00
95+00
85+00
00%
TION
ON END FULL SUPERELEVATED CROSS SLOPE @ 4.44%
BEGIN SUPERELEVATION TRANSITION
STA 67+30 DC
STA 68+00.00 DC
=STA 68+00.00 SB DC
=STA 68+00.00 NB DC
POT 70+00.00
POT 70+00.00
PROPOSED ℄ LP 197 DC
15' 04.45" E
S 69° 15' 04.45" E
2.0%
70+00
70+00
75+00
80+00
930
930
2.0%
2.0%
3.88%
PROPOSED R.O.W. & ACCESS DENIAL
END NORMAL CROWN @ 2.00%
BEGIN SUPERELEVATION TRANSITION
STA 80+50 DC
PC 81+98.35
D
D
END SUPERELEVATION TRANSITION
BEGIN FULL SUPERELEVATED
CROSS SLOPE @ 3.88%
STA 82+80 DC
PROPOSED R.O.W. & ACCESS DENIAL
END SUPERELEVATION TRANSITION
BEGIN NORMAL CROSS SLOPE @ 2.0%
STA 68+80 DC
PROPOSED R.O.W. & ACCESS DENIAL
PROPOSED RAMP
EXISTING R.O.W.
3980
3980
825+00
380
380
INTERSTATE 45
830+00
400
400
O M E G A
B A Y
MOTCO
MOTCO
L A M A R Q U E
PROPOSED R.O.W. & ACCESS DENIAL
PROPOSED R.O.W. & ACCESS DENIAL
EXISTING R.O.W.
TEXAS 146
EXISTING R.O.W.
GALVESTON, HOUSTON & HENDERSON RAILWAY
MOTCO
PROPOSED ℄ LP 197 DC
PROPOSED R.O.W. & ACCESS DENIAL
100+00
105+00
EXISTING R.O.W.
E
E
LOOP 197
900
900
105+00
110+00
RAISED MED. TIE TO EXIST
EXISTING R.O.W.
℄ LOOP 197
℄ EXIST. LOOP 197
160'
80'
80'
10'
12'
12'
12'
12'
12'
10'
EXIST R.O.W.
EXIST R.O.W.
SHLDR
SHLDR
SH 197
SECTION E-E

℄ LOOP 197 CONNECTOR CURVE 6 DATA
PI STATION = 107+10.22
DELTA = 92° 00' 57.82" (LT)
DEGREE OF CURVE = 2° 21' 45.77"
TANGENT = 2,511.87
LENGTH = 3,894.51
RADIUS = 2,425.00
PC STATION = 81+98.35
PT STATION = 120+92.86


PGL LP 197 DC
PGL LP 197 DC
PGL LP 197 DC
PROPOSED TRANSMISSION POWER LINES
TRANSMISSION LINE EASEMENT
TRANSMISSION LINE EASEMENT
30' MIN. CLEAR
VPC 90+00.00
VPT 93+00.00
ex = 0.55'
K = 205
L = 300.00 FT
-0.620%
+0.840%
VPI STA 91+50.00
EL =26.47
EXISTING TRANSMISSION POWER LINES TO BE RAISED
VPI STA 106+50.00
EL =39.07
+ 0.840%
- 0.300%
VPC 105+00.00
VPT 108+00.00
ex = -0.43'
K = 263
L = 300.00 FT
16.5' MIN. CLEAR
23' MIN. CLEAR
SH 146
G.H.H.R
NATRUAL GROUND AT PGL LP197 DC
NATRUAL GROUND AT PGL LP197 DC
70+00
75+00
80+00
85+00
90+00
95+00
100+00
105+00
110+00
115

PRELIMINARY SUBJECT TO CHANGE $DATE$
PRELIMINARY SUBJECT TO CHANGE $DATE$
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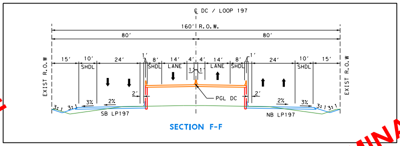
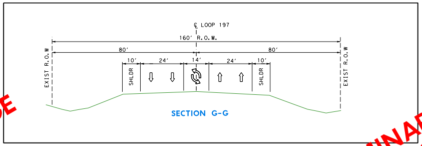
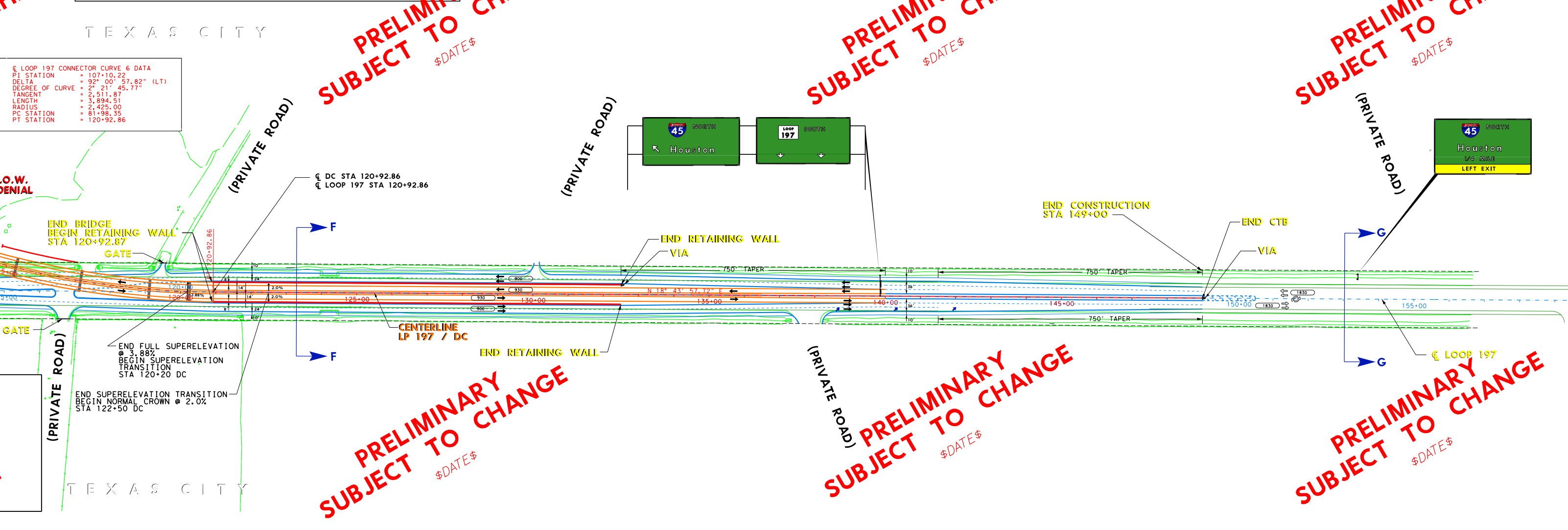

℄ DC / LOOP 197
160' R.O.W.
80'
80'
EXIST R.O.W
15'
10'
SHDL
24'
1'
8'
SHDL
14'
LANE
4'
4'
14'
LANE
8'
SHDL
1'
24'
10'
SHDL
15'
EXIST R.O.W
1'
1'
2'
2'
PGL DC
3%
2%
2%
3%
3:1
3:1
3:1
3:1
SB LP197
NB LP197

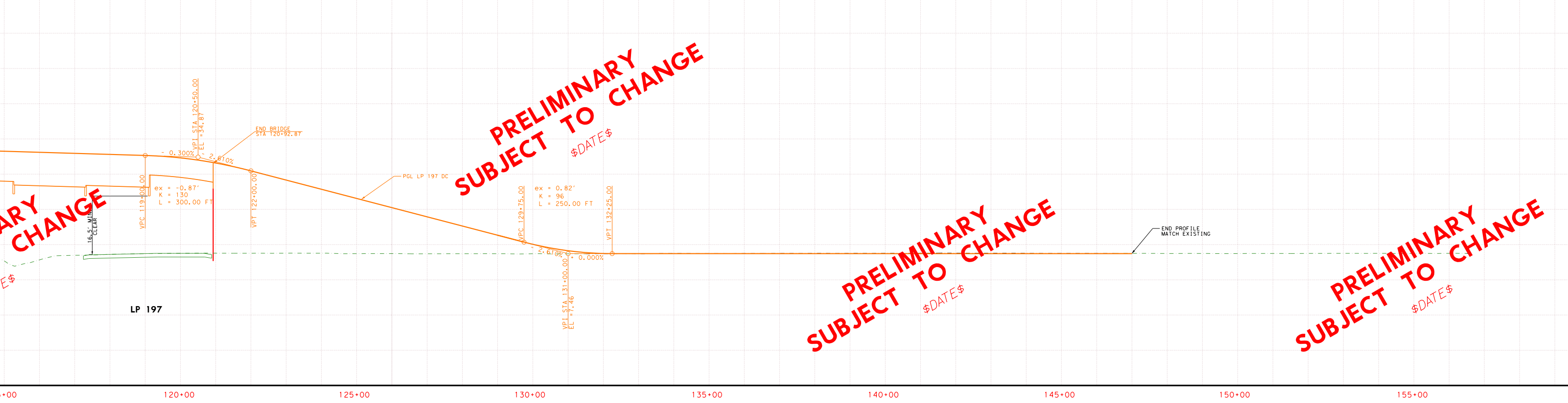
SECTION F-F


℄ LOOP 197
160' R.O.W.
80'
80'
EXIST R.O.W
10'
SHLDR
24'
14'
24'
10'
SHLDR
EXIST R.O.W

SECTION G-G

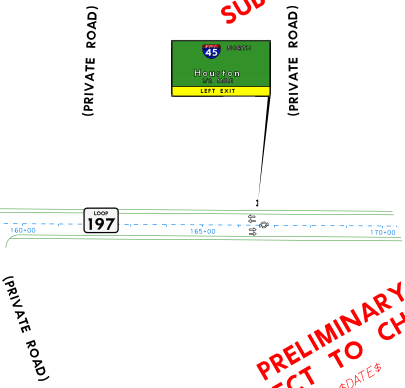

TEXAS CITY
.O.W.
DENIAL
(PRIVATE ROAD)
(PRIVATE ROAD)
(PRIVATE ROAD)
(PRIVATE ROAD)
(PRIVATE ROAD)
45
NORTH
Houston
LOOP
197
SOUTH
45
NORTH
Houston
1/4 MILE
LEFT EXIT
℄ DC STA 120+92.86
℄ LOOP 197 STA 120+92.86
END BRIDGE
BEGIN RETAINING WALL
STA 120+92.87
GATE
GATE
PT 120+92.86
F
F
G
G
END RETAINING WALL
VIA
END RETAINING WALL
END CONSTRUCTION
STA 149+00
END CTB
VIA
750' TAPER
750' TAPER
750' TAPER
N 18° 43' 57.72" E
10'
24'
8'
14'
14'
8'
24'
10'
36'
36'
3.88%
2.0%
2.0%
900
930
930
900
1830
1830
120+00
120+00
125+00
130+00
135+00
140+00
145+00
150+00
155+00
CENTERLINE
LP 197 / DC
℄ LOOP 197
END FULL SUPERELEVATION
@ 3.88%
BEGIN SUPERELEVATION
TRANSITION
STA 120+20 DC
END SUPERELEVATION TRANSITION
BEGIN NORMAL CROWN @ 2.0%
STA 122+50 DC
TEXAS CITY

℄ LOOP 197 CONNECTOR CURVE 6 DATA
PI STATION = 107+10.22
DELTA = 92° 00' 57.82" (LT)
DEGREE OF CURVE = 2° 21' 45.77"
TANGENT = 2,511.87
LENGTH = 3,894.51
RADIUS = 2,425.00
PC STATION = 81+98.35
PT STATION = 120+92.86

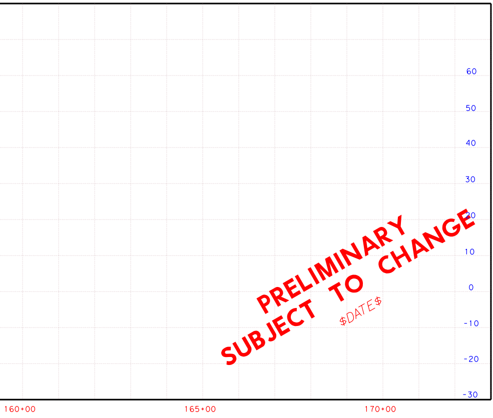

VPI STA 120+50.00
EL =34.87
END BRIDGE
STA 120+92.87
- 0.300%
- 2.610%
VPC 119+00.00
ex = -0.87'
K = 130
L = 300.00 FT
VPT 122+00.00
16.5' MIN. CLEAR
PGL LP 197 DC
VPC 129+75.00
ex = 0.82'
K = 96
L = 250.00 FT
VPT 132+25.00
- 2.610%
+ 0.000%
VPI STA 131+00.00
EL =7.46
END PROFILE
MATCH EXISTING
LP 197
+00
120+00
125+00
130+00
135+00
140+00
145+00
150+00
155+00

PRELIMINARY
SUBJECT TO CHANGE
$DATE$

PRELIMINARY
SUBJECT TO CHANGE
$DATE$


(PRIVATE ROAD)
45
NORTH
Houston
1/2 MILE
LEFT EXIT
(PRIVATE ROAD)
LOOP
197
160+00
165+00
170+00
(PRIVATE ROAD)

PRELIMINARY
SUBJECT TO CHANGE
$DATE$



PRELIMINARY
SUBJECT TO CHANGE
$DATE$