Texas Department of Transportation

DALLAS DISTRICT

DRAFT INTERIM SCHEMATIC

WILLIAM L. HALE, P.E., DISTRICT ENGINEER

INTERSTATE TEXAS 35E

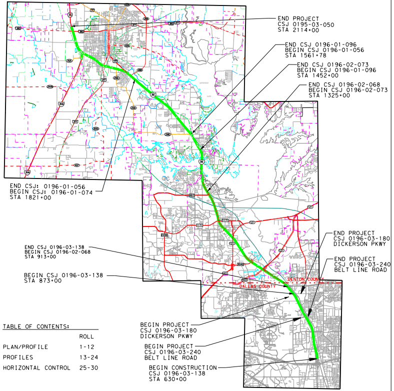
IH 35E
FROM: IH 635
TO: US 380

DALLAS & DENTON COUNTY

FUNCTIONAL CLASS: URBAN FREEWAY
PROJECT LENGTH: 28.25 MILES

CSJ's: 0196-03-138
0196-03-240
0196-03-180
0196-03-245
0196-02-068
0196-02-073
0196-01-096
0196-01-056
0196-01-074
0195-03-050
0195-03-071

DESIGN SPEEDS:
MAINLANES 70 MPH
MANAGED LANES 70 MPH
RAMPS 40 MPH
TURNAROUND RAMPS 20 MPH
FRONTAGE ROADS 40 MPH
CROSS STREETS 30 MPH
COLLECTOR DISTRIBUTOR 50 MPH
DIRECT CONNECTORS 50 MPH
INTERSECTIONS 30 MPH



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SCALE:
HORIZONTAL 1"=200'
VERTICAL 1"=20'

1/11/2013

ROLL 27 OF 30

SCHEMATIC PREPARED BY:

FOR INTERIM REVIEW ONLY
NOT FOR PERMITTING, BIDDING
OR CONSTRUCTION.

Prepared by or under the
Direct Supervision of:

NAME	P.E. NUMBER
SHAWN BRENT STOVER	109251

1/11/2013
DATE

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Plotted on: 10:18:42 AM

DIRECT CONNECTORS

DIRECT CONNECTOR 1

```
Beginning chain DC01SB1 description
Description: Direct Connector HA
****************************************************************************

Point 5              X     2,460,418.62 Y     7,015,087.62 Sta    1000+00.00

Course from 5 to PC HA-1 N 0°15' 24" E Dist 23.48

                              Curve Data
                             *----------*
Curve HA-1
P.I.  Station          1001+21.70  X        2,460,419.16  Y        7,015,209.32
Delta         =         3°43' 59" (RT)
Degree        =         1°54' 04"
Tangent       =              98.22
Length        =             196.37
Radius        =           3,014.00
External      =               1.60
Long Chord    =             196.34
Mid. Ord.     =               1.60
P.C.  Station          1000+23.48  X        2,460,418.72  Y        7,015,111.10
P.T.  Station          1002+19.86  X        2,460,426.00  Y        7,015,307.30
C.C.                               X        2,463,432.69  Y        7,015,097.60
Back          = N   0°15' 24" E
Ahead         = N   3°59' 23" E
Chord Bear    = N   2°07' 24" E

                              Curve Data
                             *----------*
Curve HA-2
P.I.  Station          1004+66.37  X        2,460,443.15  Y        7,015,553.22
Delta         =         7°03' 11" (LT)
Degree        =         1°25' 57"
Tangent       =             246.51
Length        =             492.40
Radius        =           4,000.00
External      =               7.59
Long Chord    =             492.09
Mid. Ord.     =               7.57
P.C.  Station          1002+19.86  X        2,460,426.00  Y        7,015,307.30
P.T.  Station          1007+12.25  X        2,460,429.97  Y        7,015,799.37
C.C.                               X        2,456,435.69  Y        7,015,585.61
Back          = N   3°59' 23" E
Ahead         = N   3°03' 48" W
Chord Bear    = N   0°27' 48" E

                              Curve Data
                             *----------*
Curve HA-3
P.I.  Station          1008+12.25  X        2,460,424.63  Y        7,015,899.23
Delta         =         0°25' 24" (LT)
Degree        =         0°12' 42"
Tangent       =             100.00
Length        =             200.00
Radius        =          27,062.00
External      =               0.18
Long Chord    =             200.00
Mid. Ord.     =               0.18
P.C.  Station          1007+12.25  X        2,460,429.97  Y        7,015,799.37
P.T.  Station          1009+12.25  X        2,460,418.55  Y        7,015,999.05
C.C.                               X        2,433,406.64  Y        7,014,353.19
Back          = N   3°03' 48" W
Ahead         = N   3°29' 12" W
Chord Bear    = N   3°16' 30" W

                              Curve Data
                             *----------*
Curve HA-4
P.I.  Station          1011+01.45  X        2,460,407.04  Y        7,016,187.89
Delta         =        25°32' 01" (RT)
Degree        =         6°51' 42"
Tangent       =             189.20
Length        =             372.11
Radius        =             835.00
External      =              21.17
Long Chord    =             369.04
Mid. Ord.     =              20.64
P.C.  Station          1009+12.25  X        2,460,418.55  Y        7,015,999.05
P.T.  Station          1012+84.37  X        2,460,478.06  Y        7,016,363.26
C.C.                               X        2,461,252.00  Y        7,016,049.83
Back          = N   3°29' 12" W
Ahead         = N  22°02' 49" E
Chord Bear    = N   9°16' 48" E

Course from PT HA-4 to PC HA-5 N 22°02' 49" E Dist 100.71

                              Curve Data
                             *----------*
Curve HA-5
P.I.  Station          1014+97.22  X        2,460,557.96  Y        7,016,560.55
Delta         =        15°17' 56" (LT)
Degree        =         6°51' 42"
Tangent       =             112.15
Length        =             222.96
Radius        =             835.00
External      =               7.50
Long Chord    =             222.30
Mid. Ord.     =               7.43
P.C.  Station          1013+85.07  X        2,460,515.86  Y        7,016,456.60
P.T.  Station          1016+08.03  X        2,460,571.13  Y        7,016,671.92
C.C.                               X        2,459,741.92  Y        7,016,770.03
Back          = N  22°02' 49" E
Ahead         = N   6°44' 52" E
Chord Bear    = N  14°23' 50" E

****************************************************************************
Ending chain DC01SB1 description
```

DIRECT CONNECTOR 2

```
Beginning chain DC02NB1 description
Description: Direct Connector HB
****************************************************************************

                              Curve Data
                             *----------*
Curve HB-1
P.I.  Station          1001+09.85  X        2,460,651.67  Y        7,014,774.10
Delta         =         1°28''46" (RT)
Degree        =         0°40''24"
Tangent       =             109.85
Length        =             219.69
Radius        =           8,508.00
External      =               0.71
Long Chord    =             219.69
Mid. Ord.     =               0.71
P.C.  Station          1000+00.00  X        2,460,652.87  Y        7,014,664.25
P.T.  Station          1002+19.69  X        2,460,653.30  Y        7,014,883.94
C.C.                               X        2,469,160.36  Y        7,014,757.50
Back          = N   0°37''41" W
Ahead         = N   0°51''05" E
Chord Bear    = N   0°06''42" E

                              Curve Data
                             *----------*
Curve HB-2
P.I.  Station          1003+99.58  X        2,460,655.97  Y        7,015,063.81
Delta         =         6°51''47" (LT)
Degree        =         1°54''35"
Tangent       =             179.89
Length        =             359.35
Radius        =           3,000.00
External      =               5.39
Long Chord    =             359.13
Mid. Ord.     =               5.38
P.C.  Station          1002+19.69  X        2,460,653.30  Y        7,014,883.94
P.T.  Station          1005+79.04  X        2,460,637.13  Y        7,015,242.71
C.C.                               X        2,457,653.63  Y        7,014,928.52
Back          = N   0°51''05" E
Ahead         = N   6°00''41" W
Chord Bear    = N   2°34''48" W

                              Curve Data
                             *----------*
Curve HB-3
P.I.  Station          1008+19.01  X        2,460,612.00  Y        7,015,481.36
Delta         =         6°51''59" (RT)
Degree        =         1°25''57"
Tangent       =             239.97
Length        =             479.36
Radius        =           4,000.00
External      =               7.19
Long Chord    =             479.07
Mid. Ord.     =               7.18
P.C.  Station          1005+79.04  X        2,460,637.13  Y        7,015,242.71
P.T.  Station          1010+58.40  X        2,460,615.58  Y        7,015,721.29
C.C.                               X        2,464,615.14  Y        7,015,661.62
Back          = N   6°00''41" W
Ahead         = N   0°51''17" E
Chord Bear    = N   2°34''42" W

Course from PT HB-3 to PC HB-4 N 0°51''17" E Dist 446.24
```

"PRELIMINARY SUBJECT TO CHANGE"
BASED ON FURTHER DEVELOPMENTS RESULTING
FROM PUBLIC INPUT AND TECHNICAL REVIEWS

DIRECT CONNECTOR 2 (CONT)

```
                              Curve Data
                             *----------*
Curve HB-4
P.I.  Station          1015+84.81  X        2,460,623.43  Y        7,016,247.65
Delta         =        10°58''08" (LT)
Degree        =         6°51''42"
Tangent       =              80.17
Length        =             159.86
Radius        =             835.00
External      =               3.84
Long Chord    =             159.61
Mid. Ord.     =               3.82
P.C.  Station          1015+04.64  X        2,460,622.24  Y        7,016,167.48
P.T.  Station          1016+64.49  X        2,460,609.35  Y        7,016,326.58
C.C.                               X        2,459,787.33  Y        7,016,179.94
Back          = N   0°51''17" E
Ahead         = N  10°06''51" W
Chord Bear    = N   4°37''47" W

Course from PT HB-4 to PC HB-5 N 10°06''51" W Dist 98.71

                              Curve Data
                             *----------*
Curve HB-5
P.I.  Station          1018+86.97  X        2,460,570.29  Y        7,016,545.60
Delta         =        16°51''43" (RT)
Degree        =         6°51''42"
Tangent       =             123.76
Length        =             245.74
Radius        =             835.00
External      =               9.12
Long Chord    =             244.85
Mid. Ord.     =               9.02
P.C.  Station          1017+63.21  X        2,460,592.02  Y        7,016,423.76
P.T.  Station          1020+08.95  X        2,460,584.83  Y        7,016,668.50
C.C.                               X        2,461,414.04  Y        7,016,570.39
Back          = N  10°06''51" W
Ahead         = N   6°44''52" E
Chord Bear    = N   1°40''59" W

Course from PT HB-5 to 6 N 6°44''52" E Dist 439.38

Point 6              X     2,460,636.46 Y     7,017,104.84 Sta    1024+48.33

****************************************************************************
Ending chain DC02NB1 description
```

DIRECT CONNECTOR 3

```
Beginning chain DC03SB1 description
Description: Direct Connector HC
****************************************************************************

Point 7              X     2,459,974.30 Y     7,019,598.50 Sta    1000+00.00

Course from 7 to PC HC-1 N 1°29' 31" W Dist 1,047.17

                              Curve Data
                             *----------*
Curve HC-1
P.I.  Station          1012+58.87  X        2,459,941.53  Y        7,020,856.95
Delta         =        28°00' 10" (RT)
Degree        =         6°44' 55"
Tangent       =             211.70
Length        =             414.94
Radius        =             849.00
External      =              26.00
Long Chord    =             410.82
Mid. Ord.     =              25.22
P.C.  Station          1010+47.17  X        2,459,947.04  Y        7,020,645.32
P.T.  Station          1014+62.11  X        2,460,036.02  Y        7,021,046.39
C.C.                               X        2,460,795.75  Y        7,020,667.42
Back          = N   1°29' 31" W
Ahead         = N  26°30' 39" E
Chord Bear    = N  12°30' 34" E

Course from PT HC-1 to PC HC-2 N 26°30' 39" E Dist 225.97

                              Curve Data
                             *----------*
Curve HC-2
P.I.  Station          1020+08.93  X        2,460,280.11  Y        7,021,535.71
Delta         =        42°02' 18" (LT)
Degree        =         6°51' 42"
Tangent       =             320.85
Length        =             612.64
Radius        =             835.00
External      =              59.52
Long Chord    =             598.99
Mid. Ord.     =              55.56
P.C.  Station          1016+88.08  X        2,460,136.89  Y        7,021,248.60
P.T.  Station          1023+00.73  X        2,460,194.22  Y        7,021,844.85
C.C.                               X        2,459,389.69  Y        7,021,621.32
Back          = N  26°30' 39" E
Ahead         = N  15°31' 39" W
Chord Bear    = N   5°29' 30" E

Course from PT HC-2 to PC HC-3 N 15°31' 39" W Dist 629.63

                              Curve Data
                             *----------*
Curve HC-3
P.I.  Station          1031+08.58  X        2,459,977.95  Y        7,022,623.21
Delta         =         4°35' 05" (RT)
Degree        =         1°17' 13"
Tangent       =             178.21
Length        =             356.24
Radius        =           4,452.00
External      =               3.57
Long Chord    =             356.14
Mid. Ord.     =               3.56
P.C.  Station          1029+30.36  X        2,460,025.66  Y        7,022,451.50
P.T.  Station          1032+86.60  X        2,459,944.12  Y        7,022,798.18
C.C.                               X        2,464,315.17  Y        7,023,643.30
Back          = N  15°31' 39" W
Ahead         = N  10°56' 34" W
Chord Bear    = N  13°14' 06" W

                              Curve Data
                             *----------*
Curve HC-4
P.I.  Station          1034+67.82  X        2,459,909.72  Y        7,022,976.11
Delta         =         4°34' 00" (LT)
Degree        =         1°15' 38"
Tangent       =             181.22
Length        =             362.24
Radius        =           4,545.00
External      =               3.61
Long Chord    =             362.15
Mid. Ord.     =               3.61
P.C.  Station          1032+86.60  X        2,459,944.12  Y        7,022,798.18
P.T.  Station          1036+48.85  X        2,459,861.27  Y        7,023,150.73
C.C.                               X        2,455,481.76  Y        7,021,935.41
Back          = N  10°56' 34" W
Ahead         = N  15°30' 34" W
Chord Bear    = N  13°13' 34" W

****************************************************************************
Ending chain DC03SB1 description
```

DIRECT CONNECTOR 4

```
Beginning chain DC04NB1 description
Description: Direct Connector HD
****************************************************************************

Point 8              X     2,460,953.75 Y     7,018,907.57 Sta    1000+00.00

Course from 8 to PC HD-1 N 41°36''00" W Dist 349.27

                              Curve Data
                             *----------*
Curve HD-1
P.I.  Station          1006+61.28  X        2,460,514.72  Y        7,019,402.07
Delta         =        40°58''38" (RT)
Degree        =         6°51''42"
Tangent       =             312.00
Length        =             597.18
Radius        =             835.00
External      =              56.39
Long Chord    =             584.53
Mid. Ord.     =              52.82
P.C.  Station          1003+49.27  X        2,460,721.86  Y        7,019,168.75
P.T.  Station          1009+46.45  X        2,460,511.32  Y        7,019,714.05
C.C.                               X        2,461,346.28  Y        7,019,723.13
Back          = N  41°36''00" W
Ahead         = N   0°37''22" W
Chord Bear    = N  21°06''41" W

Course from PT HD-1 to PC HD-2 N 0°37''22" W Dist 593.79

                              Curve Data
                             *----------*
Curve HD-2
P.I.  Station          1022+02.86  X        2,460,497.67  Y        7,020,970.38
Delta         =        15°05''53" (LT)
Degree        =         1°08''45"
Tangent       =             662.62
Length        =           1,317.55
Radius        =           5,000.00
External      =              43.71
Long Chord    =           1,313.75
Mid. Ord.     =              43.34
P.C.  Station          1015+40.24  X        2,460,504.87  Y        7,020,307.81
P.T.  Station          1028+57.80  X        2,460,318.13  Y        7,021,608.21
C.C.                               X        2,455,505.17  Y        7,020,253.46
Back          = N   0°37''22" W
Ahead         = N  15°43''15" W
Chord Bear    = N   8°10''19" W
```

DIRECT CONNECTOR 4 (CONT)

```
                              Curve Data
                             *----------*
Curve HD-3
P.I.  Station          1028+71.30  X        2,460,314.47  Y        7,021,621.21
Delta         =         0°11''36" (RT)
Degree        =         0°42''58"
Tangent       =              13.50
Length        =              27.01
Radius        =           8,000.00
External      =               0.01
Long Chord    =              27.01
Mid. Ord.     =               0.01
P.C.  Station          1028+57.80  X        2,460,318.13  Y        7,021,608.21
P.T.  Station          1028+84.81  X        2,460,310.86  Y        7,021,634.23
C.C.                               X        2,468,018.87  Y        7,023,775.83
Back          = N  15°43''15" W
Ahead         = N  15°31''39" W
Chord Bear    = N  15°37''27" W

Course from PT HD-3 to 9 N 15°31''39" W Dist 1,189.93

Point 9              X     2,459,992.31 Y     7,022,780.73 Sta    1040+74.74

****************************************************************************
Ending chain DC04NB1 description
```

DIRECT CONNECTOR 5

```
Beginning chain DC05NB1 description
Description: Direct Connector HE
****************************************************************************

                              Curve Data
                             *----------*
Curve HE-1
P.I.  Station          1000+54.41  X        2,460,279.52  Y        7,022,085.11
Delta         =         2°35' 46" (RT)
Degree        =         2°23' 11"
Tangent       =              54.41
Length        =             108.79
Radius        =           2,401.00
External      =               0.62
Long Chord    =             108.78
Mid. Ord.     =               0.62
P.C.  Station          1000+00.00  X        2,460,303.13  Y        7,022,036.09
P.T.  Station          1001+08.79  X        2,460,258.15  Y        7,022,135.14
C.C.                               X        2,462,466.24  Y        7,023,078.09
Back          = N  25°43' 15" W
Ahead         = N  23°07' 28" W
Chord Bear    = N  24°25' 21" W

                              Curve Data
                             *----------*
Curve HE-2
P.I.  Station          1003+41.73  X        2,460,166.67  Y        7,022,349.36
Delta         =         7°36' 55" (RT)
Degree        =         1°38' 13"
Tangent       =             232.94
Length        =             465.19
Radius        =           3,500.00
External      =               7.74
Long Chord    =             464.84
Mid. Ord.     =               7.73
P.C.  Station          1001+08.79  X        2,460,258.15  Y        7,022,135.14
P.T.  Station          1005+73.98  X        2,460,104.38  Y        7,022,573.82
C.C.                               X        2,463,476.94  Y        7,023,509.70
Back          = N  23°07' 28" W
Ahead         = N  15°30' 34" W
Chord Bear    = N  19°19' 01" W

****************************************************************************
Ending chain DC05NB1 description
```

DIRECT CONNECTOR 6

```
Beginning chain DC06EB1 description
Description: Direct Connector HF
****************************************************************************

Point 10             X     2,450,893.21 Y     7,044,139.48 Sta    1000+00.00

Course from 10 to PC HF-1 N 39°15' 52" W Dist 33.78

                              Curve Data
                             *----------*
Curve HF-1
P.I.  Station          1009+47.74  X        2,450,293.39  Y        7,044,873.25
Delta         =       106°46' 51" (RT)
Degree        =         8°26' 18"
Tangent       =             913.95
Length        =           1,265.44
Radius        =             679.00
External      =             459.57
Long Chord    =           1,090.09
Mid. Ord.     =             274.07
P.C.  Station          1000+33.78  X        2,450,871.83  Y        7,044,165.63
P.T.  Station          1012+99.22  X        2,451,137.87  Y        7,045,222.76
C.C.                               X        2,451,397.53  Y        7,044,595.37
Back          = N  39°15' 52" W
Ahead         = N  67°30' 59" E
Chord Bear    = N  14°07' 33" E

****************************************************************************
Ending chain DC06EB1 description
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DIRECT CONNECTOR 7

```
Beginning chain DC07NB1 description
Description: Direct Connector HJ
****************************************************************************

Point 11             X     2,449,747.20 Y     7,045,538.69 Sta    1002+95.92

Course from 11 to PC HJ-1 N 48° 13''15" W Dist 185.06

                              Curve Data
                             *----------*
Curve HJ-1
P.I.  Station          1006+47.05  X        2,449,485.35  Y        7,045,772.63
Delta         =         3° 10''15" (RT)
Degree        =         0° 57''18"
Tangent       =             166.07
Length        =             332.06
Radius        =           6,000.00
External      =               2.30
Long Chord    =             332.02
Mid. Ord.     =               2.30
P.C.  Station          1004+80.97  X        2,449,609.19  Y        7,045,661.99
P.T.  Station          1008+13.03  X        2,449,367.82  Y        7,045,889.96
C.C.                               X        2,453,606.76  Y        7,050,136.30
Back          = N  48° 13''15" W
Ahead         = N  45° 03''00" W
Chord Bear    = N  46° 38''08" W

                              Curve Data
                             *----------*
Curve HJ-2
P.I.  Station          1014+61.72  X        2,448,908.73  Y        7,046,348.25
Delta         =        12° 16''41" (LT)
Degree        =         0° 57''00"
Tangent       =             648.69
Length        =           1,292.41
Radius        =           6,031.00
External      =              34.79
Long Chord    =           1,289.94
Mid. Ord.     =              34.59
P.C.  Station          1008+13.03  X        2,449,367.82  Y        7,045,889.96
P.T.  Station          1021+05.44  X        2,448,362.68  Y        7,046,698.43
C.C.                               X        2,445,106.98  Y        7,041,621.68
Back          = N  45° 03''00" W
Ahead         = N  57° 19''41" W
Chord Bear    = N  51° 11''21" W

Course from PT HJ-2 to PC HJ-3 N 57° 19''41" W Dist 436.36

                              Curve Data
                             *----------*
Curve HJ-3
P.I.  Station          1026+61.03  X        2,447,895.00  Y        7,046,998.35
Delta         =         1° 42''27" (RT)
Degree        =         0° 42''58"
Tangent       =             119.22
Length        =             238.43
Radius        =           8,000.00
External      =               0.89
Long Chord    =             238.42
Mid. Ord.     =               0.89
P.C.  Station          1025+41.81  X        2,447,995.36  Y        7,046,934.00
P.T.  Station          1027+80.23  X        2,447,796.60  Y        7,047,065.68
C.C.                               X        2,452,313.97  Y        7,053,668.20
Back          = N  57° 19''41" W
Ahead         = N  55° 37''14" W
Chord Bear    = N  56° 28''28" W

                              Curve Data
                             *----------*
Curve HJ-4
P.I.  Station          1029+39.11  X        2,447,665.47  Y        7,047,155.39
Delta         =         3° 02''01" (LT)
Degree        =         0° 57''18"
Tangent       =             158.88
Length        =             317.69
Radius        =           6,000.00
External      =               2.10
Long Chord    =             317.65
Mid. Ord.     =               2.10
P.C.  Station          1027+80.23  X        2,447,796.60  Y        7,047,065.68
P.T.  Station          1030+97.92  X        2,447,529.78  Y        7,047,238.04
C.C.                               X        2,444,408.57  Y        7,042,113.78
Back          = N  55° 37''14" W
Ahead         = N  58° 39''15" W
Chord Bear    = N  57° 08''15" W

****************************************************************************
Ending chain DC07NB1 description
```

DIRECT CONNECTOR 8

```
Beginning chain DC08NB1 description
Description: Direct Connector HK
**********************************************************************

                         Curve Data
                        *----------*
Curve HK-1
P.I.  Station           7+35.56  X     2,439,165.85  Y     7,049,230.44
Delta        =      1°19' 14" (RT)
Degree       =      1°40' 58"
Tangent      =            39.24
Length       =            78.47
Radius       =         3,405.00
External     =             0.23
Long Chord   =            78.47
Mid. Ord.    =             0.23
P.C.  Station           6+96.32  X     2,439,132.32  Y     7,049,210.05
P.T.  Station           7+74.79  X     2,439,199.84  Y     7,049,250.04
C.C.                             X     2,440,901.11  Y     7,046,300.52
Back         = N  58°42' 12" E
Ahead        = N  60°01' 26" E
Chord Bear   = N  59°21' 49" E

                         Curve Data
                        *----------*
Curve HK-2
P.I.  Station          11+33.14  X     2,439,510.25  Y     7,049,429.09
Delta        =     12°00' 57" (LT)
Degree       =      1°40' 58"
Tangent      =           358.35
Length       =           714.08
Radius       =         3,405.00
External     =            18.81
Long Chord   =           712.77
Mid. Ord.    =            18.70
P.C.  Station           7+74.79  X     2,439,199.84  Y     7,049,250.04
P.T.  Station          14+88.87  X     2,439,776.60  Y     7,049,668.84
C.C.                             X     2,437,498.56  Y     7,052,199.57
Back         = N  60°01' 26" E
Ahead        = N  48°00' 29" E
Chord Bear   = N  54°00' 57" E

Course from PT HK-2 to PC HK-3 N 48°00' 29" E Dist 908.64

                         Curve Data
                        *----------*
Curve HK-3
P.I.  Station          37+80.79  X     2,441,480.04  Y     7,051,202.20
Delta        =    105°20' 10" (LT)
Degree       =      5°25' 51"
Tangent      =         1,383.29
Length       =         1,939.58
Radius       =         1,055.00
External     =           684.69
Long Chord   =         1,677.74
Mid. Ord.    =           415.21
P.C.  Station          23+97.51  X     2,440,451.93  Y     7,050,276.74
P.T.  Station          43+37.08  X     2,440,315.63  Y     7,051,948.93
C.C.                             X     2,439,746.11  Y     7,051,060.86
Back         = N  48°00' 29" E
Ahead        = N  57°19' 41" W
Chord Bear   = N   4°39' 36" W

Course from PT HK-3 to PC HK-4 N 57°19' 41" W Dist 1,192.67

                         Curve Data
                        *----------*
Curve HK-4
P.I.  Station          57+69.21  X     2,439,110.10  Y     7,052,722.03
Delta        =      9°05' 05" (LT)
Degree       =      1°54' 04"
Tangent      =           239.45
Length       =           477.90
Radius       =         3,014.00
External     =             9.50
Long Chord   =           477.40
Mid. Ord.    =             9.47
P.C.  Station          55+29.76  X     2,439,311.66  Y     7,052,592.77
P.T.  Station          60+07.66  X     2,438,890.65  Y     7,052,817.85
C.C.                             X     2,437,684.62  Y     7,050,055.66
Back         = N  57°19' 41" W
Ahead        = N  66°24' 47" W
Chord Bear   = N  61°52' 14" W

**********************************************************************
Ending chain DC08NB1 description
```

DIRECT CONNECTOR 9

```
Beginning chain DC09EB1 description
Description: Direct Connector HM
**********************************************************************

Point 12            X     2,440,455.19 Y     7,051,448.03 Sta     1000+00.00

Course from 12 to PC HM-1 S 57°19''41" E Dist 192.87

                         Curve Data
                        *----------*
Curve HM-1
P.I.  Station        1011+23.26  X     2,441,400.72  Y     7,050,841.66
Delta        =     82°49''02" (LT)
Degree       =      5°25''51"
Tangent      =           930.39
Length       =         1,524.93
Radius       =         1,055.00
External     =           351.65
Long Chord   =         1,395.61
Mid. Ord.    =           263.74
P.C.  Station        1001+92.87  X     2,440,617.54  Y     7,051,343.91
P.T.  Station        1017+17.80  X     2,441,996.95  Y     7,051,555.90
C.C.                             X     2,441,187.06  Y     7,052,231.98
Back         = S  57°19''41" E
Ahead        = N  39°51''16" E
Chord Bear   = N  81°15''48" E

Course from PT HM-1 to PC HM-2 N 39°51''16" E Dist 512.12

                         Curve Data
                        *----------*
Curve HM-2
P.I.  Station        1023+64.00  X     2,442,411.06  Y     7,052,051.96
Delta        =      4°30''59" (RT)
Degree       =      1°41''07"
Tangent      =           134.07
Length       =           268.01
Radius       =         3,400.00
External     =             2.64
Long Chord   =           267.94
Mid. Ord.    =             2.64
P.C.  Station        1022+29.92  X     2,442,325.14  Y     7,051,949.04
P.T.  Station        1024+97.93  X     2,442,504.82  Y     7,052,147.80
C.C.                             X     2,444,935.23  Y     7,049,770.18
Back         = N  39°51''16" E
Ahead        = N  44°22''15" E
Chord Bear   = N  42°06''46" E

                         Curve Data
                        *----------*
Curve HM-3
P.I.  Station        1025+59.02  X     2,442,547.54  Y     7,052,191.47
Delta        =      2°02''48" (LT)
Degree       =      1°40''31"
Tangent      =            61.09
Length       =           122.16
Radius       =         3,420.00
External     =             0.55
Long Chord   =           122.15
Mid. Ord.    =             0.55
P.C.  Station        1024+97.93  X     2,442,504.82  Y     7,052,147.80
P.T.  Station        1026+20.09  X     2,442,588.67  Y     7,052,236.63
C.C.                             X     2,440,060.11  Y     7,054,539.41
Back         = N  44°22''15" E
Ahead        = N  42°19''28" E
Chord Bear   = N  43°20''51" E

**********************************************************************
Ending chain DC09EB1 description
```

DIRECT CONNECTOR 10

```
Beginning chain DC10WB1 description
Description: Direct Connector HN
**********************************************************************

                         Curve Data
                        *----------*
Curve HN-1
P.I.  Station        1002+89.19  X     2,437,672.90  Y     7,053,357.63
Delta        =      2°45''31" (LT)
Degree       =      0°28''37"
Tangent      =           289.19
Length       =           578.27
Radius       =        12,011.00
External     =             3.48
Long Chord   =           578.22
Mid. Ord.    =             3.48
P.C.  Station        1000+00.00  X     2,437,433.44  Y     7,053,519.77
P.T.  Station        1005+78.27  X     2,437,919.89  Y     7,053,207.21
C.C.                             X     2,444,167.51  Y     7,063,465.45
Back         = S  55°53''55" E
Ahead        = S  58°39''26" E
Chord Bear   = S  57°16''40" E
```

DIRECT CONNECTOR 10

```
                         Curve Data
                        *----------*
Curve HN-2
P.I.  Station        1008+46.05  X     2,438,148.60  Y     7,053,067.92
Delta        =      7°39' 35" (RT)
Degree       =      1°25' 57"
Tangent      =           267.78
Length       =           534.76
Radius       =         4,000.00
External     =             8.95
Long Chord   =           534.36
Mid. Ord.    =             8.93
P.C.  Station        1005+78.27  X     2,437,919.89  Y     7,053,207.21
P.T.  Station        1011+13.03  X     2,438,356.69  Y     7,052,899.39
C.C.                             X     2,435,839.26  Y     7,049,790.93
Back         = S  58°39' 26" E
Ahead        = S  50°59' 50" E
Chord Bear   = S  54°49' 38" E

                         Curve Data
                        *----------*
Curve HN-3
P.I.  Station        1014+44.85  X     2,438,614.55  Y     7,052,690.56
Delta        =      6°19' 51" (LT)
Degree       =      0°57' 18"
Tangent      =           331.82
Length       =           662.96
Radius       =         6,000.00
External     =             9.17
Long Chord   =           662.62
Mid. Ord.    =             9.15
P.C.  Station        1011+13.03  X     2,438,356.69  Y     7,052,899.39
P.T.  Station        1017+75.99  X     2,438,893.87  Y     7,052,511.44
C.C.                             X     2,442,132.83  Y     7,057,562.09
Back         = S  50°59' 50" E
Ahead        = S  57°19' 41" E
Chord Bear   = S  54°09' 46" E

Course from PT HN-3 to PC HN-4 S 57°19' 41" E Dist 409.59

                         Curve Data
                        *----------*
Curve HN-4
P.I.  Station        1023+62.71  X     2,439,387.75  Y     7,052,194.71
Delta        =      6°20' 11" (RT)
Degree       =      1°47' 26"
Tangent      =           177.13
Length       =           353.89
Radius       =         3,200.00
External     =             4.90
Long Chord   =           353.71
Mid. Ord.    =             4.89
P.C.  Station        1021+85.58  X     2,439,238.65  Y     7,052,290.33
P.T.  Station        1025+39.47  X     2,439,525.39  Y     7,052,083.22
C.C.                             X     2,437,511.20  Y     7,049,596.65
Back         = S  57°19' 41" E
Ahead        = S  50°59' 30" E
Chord Bear   = S  54°09' 36" E

                         Curve Data
                        *----------*
Curve HN-5
P.I.  Station        1029+26.94  X     2,439,826.47  Y     7,051,839.34
Delta        =      6°20' 11" (LT)
Degree       =      0°49' 07"
Tangent      =           387.46
Length       =           774.14
Radius       =         7,000.00
External     =            10.72
Long Chord   =           773.75
Mid. Ord.    =            10.70
P.C.  Station        1025+39.47  X     2,439,525.39  Y     7,052,083.22
P.T.  Station        1033+13.61  X     2,440,152.63  Y     7,051,630.17
C.C.                             X     2,443,931.42  Y     7,057,522.61
Back         = S  50°59' 30" E
Ahead        = S  57°19' 41" E
Chord Bear   = S  54°09' 36" E

Course from PT HN-5 to PC HN-6 S 57°19' 41" E Dist 287.78

                         Curve Data
                        *----------*
Curve HN-6
P.I.  Station        1042+70.31  X     2,440,957.95  Y     7,051,113.73
Delta        =    104°16' 43" (RT)
Degree       =     11°01' 06"
Tangent      =           668.92
Length       =           946.40
Radius       =           520.00
External     =           327.26
Long Chord   =           821.09
Mid. Ord.    =           200.85
P.C.  Station        1036+01.39  X     2,440,394.87  Y     7,051,474.82
P.T.  Station        1045+47.79  X     2,440,469.13  Y     7,050,657.10
C.C.                             X     2,440,114.16  Y     7,051,037.10
Back         = S  57°19' 41" E
Ahead        = S  46°57' 02" W
Chord Bear   = S   5°11' 20" E

Course from PT HN-6 to PC HN-7 S 46°57' 02" W Dist 264.28

                         Curve Data
                        *----------*
Curve HN-7
P.I.  Station        1051+03.80  X     2,440,062.82  Y     7,050,277.56
Delta        =      5°49''08" (LT)
Degree       =      0°59''53"
Tangent      =           291.72
Length       =           582.94
Radius       =         5,740.00
External     =             7.41
Long Chord   =           582.69
Mid. Ord.    =             7.40
P.C.  Station        1048+12.08  X     2,440,276.00  Y     7,050,476.70
P.T.  Station        1053+95.02  X     2,439,870.93  Y     7,050,057.83
C.C.                             X     2,444,194.30  Y     7,046,282.11
Back         = S  46°57''02" W
Ahead        = S  41°07''54" W
Chord Bear   = S  44°02''28" W

**********************************************************************
Ending chain DC10WB1 description
```

DIRECT CONNECTOR 11

```
Beginning chain DC11NB1 description
Description: Direct Connector HP
**********************************************************************

Point 13            X     2,442,910.72 Y     7,052,902.82 Sta     1000+00.00

Course from 13 to PC HP-1 S 51° 56' 37" W Dist 899.05

                         Curve Data
                        *----------*
Curve HP-1
P.I.  Station        1009+35.89  X     2,442,173.80  Y     7,052,325.91
Delta        =      4° 00' 00" (RT)
Degree       =      5° 25' 51"
Tangent      =            36.84
Length       =            73.65
Radius       =         1,055.00
External     =             0.64
Long Chord   =            73.64
Mid. Ord.    =             0.64
P.C.  Station        1008+99.05  X     2,442,202.81  Y     7,052,348.62
P.T.  Station        1009+72.70  X     2,442,143.28  Y     7,052,305.28
C.C.                             X     2,441,552.47  Y     7,053,179.33
Back         = S  51° 56' 37" W
Ahead        = S  55° 56' 37" W
Chord Bear   = S  53° 56' 37" W

Course from PT HP-1 to PC HP-2 S 55° 56' 37" W Dist 765.78

                         Curve Data
                        *----------*
Curve HP-2
P.I.  Station        1022+88.31  X     2,441,053.31  Y     7,051,568.52
Delta        =     66° 43' 41" (RT)
Degree       =      6° 51' 42"
Tangent      =           549.83
Length       =           972.46
Radius       =           835.00
External     =           164.77
Long Chord   =           918.43
Mid. Ord.    =           137.61
P.C.  Station        1017+38.48  X     2,441,508.83  Y     7,051,876.43
P.T.  Station        1027+10.95  X     2,440,590.47  Y     7,051,865.34
C.C.                             X     2,441,041.23  Y     7,052,568.22
Back         = S  55° 56' 37" W
Ahead        = N  57° 19' 41" W
Chord Bear   = S  89° 18' 28" W

Course from PT HP-2 to PC HP-3 N 57° 19' 41" W Dist 608.48

                         Curve Data
                        *----------*
Curve HP-3
P.I.  Station        1033+95.80  X     2,440,013.98  Y     7,052,235.04
Delta        =      8° 16' 52" (LT)
Degree       =      5° 25' 51"
Tangent      =            76.37
Length       =           152.48
Radius       =         1,055.00
External     =             2.76
Long Chord   =           152.35
Mid. Ord.    =             2.75
P.C.  Station        1033+19.42  X     2,440,078.27  Y     7,052,193.81
P.T.  Station        1034+71.90  X     2,439,944.42  Y     7,052,266.58
C.C.                             X     2,439,508.75  Y     7,051,305.74
Back         = N  57° 19' 41" W
Ahead        = N  65° 36' 33" W
Chord Bear   = N  61° 28' 07" W
```

DIRECT CONNECTOR 11

```
                         Curve Data
                        *----------*
Curve HP-4
P.I.  Station        1035+48.13  X     2,439,875.00  Y     7,052,298.06
Delta        =      8° 15' 55" (RT)
Degree       =      5° 25' 51"
Tangent      =            76.23
Length       =           152.19
Radius       =         1,055.00
External     =             2.75
Long Chord   =           152.06
Mid. Ord.    =             2.74
P.C.  Station        1034+71.90  X     2,439,944.42  Y     7,052,266.58
P.T.  Station        1036+24.09  X     2,439,810.82  Y     7,052,339.19
C.C.                             X     2,440,380.09  Y     7,053,227.42
Back         = N  65° 36' 33" W
Ahead        = N  57° 20' 38" W
Chord Bear   = N  61° 28' 36" W

Course from PT HP-4 to PC HP-5 N 57° 20' 38" W Dist 200.00

                         Curve Data
                        *----------*
Curve HP-5
P.I.  Station        1041+86.78  X     2,439,337.08  Y     7,052,642.81
Delta        =     10° 21' 43" (LT)
Degree       =      1° 25' 57"
Tangent      =           362.69
Length       =           723.40
Radius       =         4,000.00
External     =            16.41
Long Chord   =           722.42
Mid. Ord.    =            16.34
P.C.  Station        1038+24.09  X     2,439,642.44  Y     7,052,447.11
P.T.  Station        1045+47.50  X     2,439,001.50  Y     7,052,780.40
C.C.                             X     2,437,484.06  Y     7,049,079.40
Back         = N  57° 20' 38" W
Ahead        = N  67° 42' 21" W
Chord Bear   = N  62° 31' 30" W

                         Curve Data
                        *----------*
Curve HP-6
P.I.  Station        1049+54.63  X     2,438,624.79  Y     7,052,934.85
Delta        =     11° 37' 25" (RT)
Degree       =      1° 25' 57"
Tangent      =           407.14
Length       =           811.48
Radius       =         4,000.00
External     =            20.67
Long Chord   =           810.09
Mid. Ord.    =            20.56
P.C.  Station        1045+47.50  X     2,439,001.50  Y     7,052,780.40
P.T.  Station        1053+58.98  X     2,438,286.93  Y     7,053,162.04
C.C.                             X     2,440,518.94  Y     7,056,481.40
Back         = N  67° 42' 21" W
Ahead        = N  56° 04' 56" W
Chord Bear   = N  61° 53' 39" W

**********************************************************************
Ending chain DC11NB1 description
```

DIRECT CONNECTOR 12

```
Beginning chain DC12SB1 description
Description: Direct Connector HQ
**********************************************************************

Point 14            X     2,449,064.55 Y     7,045,838.76 Sta     1000+00.00

Course from 14 to PC HQ-1 N 42° 19''35" W Dist 47.42

                         Curve Data
                        *----------*
Curve HQ-1
P.I.  Station        1005+48.81  X     2,448,695.01  Y     7,046,244.51
Delta        =     14° 17''21" (LT)
Degree       =      1° 25''57"
Tangent      =           501.38
Length       =           997.57
Radius       =         4,000.00
External     =            31.30
Long Chord   =           994.98
Mid. Ord.    =            31.06
P.C.  Station        1000+47.42  X     2,449,032.62  Y     7,045,873.82
P.T.  Station        1010+44.99  X     2,448,276.36  Y     7,046,520.40
C.C.                             X     2,446,075.34  Y     7,043,180.41
Back         = N  42° 19''35" W
Ahead        = N  56° 36''56" W
Chord Bear   = N  49° 28''16" W

                         Curve Data
                        *----------*
Curve HQ-2
P.I.  Station        1010+82.30  X     2,448,245.20  Y     7,046,540.93
Delta        =      0° 42''45" (LT)
Degree       =      0° 57''18"
Tangent      =            37.31
Length       =            74.62
Radius       =         6,000.00
External     =             0.12
Long Chord   =            74.62
Mid. Ord.    =             0.12
P.C.  Station        1010+44.99  X     2,448,276.36  Y     7,046,520.40
P.T.  Station        1011+19.61  X     2,448,213.80  Y     7,046,561.07
C.C.                             X     2,444,974.83  Y     7,041,510.41
Back         = N  56° 36''56" W
Ahead        = N  57° 19''41" W
Chord Bear   = N  56° 58''19" W

Course from PT HQ-2 to PC HQ-3 N 57° 19''41" W Dist 945.06

                         Curve Data
                        *----------*
Curve HQ-3
P.I.  Station        1021+31.35  X     2,447,362.14  Y     7,047,107.23
Delta        =      1° 54''36" (LT)
Degree       =      1° 25''57"
Tangent      =            66.68
Length       =           133.34
Radius       =         4,000.00
External     =             0.56
Long Chord   =           133.33
Mid. Ord.    =             0.56
P.C.  Station        1020+64.67  X     2,447,418.27  Y     7,047,071.24
P.T.  Station        1021+98.01  X     2,447,304.84  Y     7,047,141.34
C.C.                             X     2,445,258.96  Y     7,043,704.14
Back         = N  57° 19''41" W
Ahead        = N  59° 14''17" W
Chord Bear   = N  58° 16''59" W

                         Curve Data
                        *----------*
Curve HQ-4
P.I.  Station        1022+81.36  X     2,447,233.23  Y     7,047,183.96
Delta        =      1° 54''36" (RT)
Degree       =      1° 08''45"
Tangent      =            83.34
Length       =           166.67
Radius       =         5,000.00
External     =             0.69
Long Chord   =           166.67
Mid. Ord.    =             0.69
P.C.  Station        1021+98.01  X     2,447,304.84  Y     7,047,141.34
P.T.  Station        1023+64.69  X     2,447,163.07  Y     7,047,228.96
C.C.                             X     2,449,862.20  Y     7,051,437.84
Back         = N  59° 14''17" W
Ahead        = N  57° 19''41" W
Chord Bear   = N  58° 16''59" W

**********************************************************************
Ending chain DC12SB1 description
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RAMPS

HOV RAMP 2

```
Beginning chain RMP35M02 description
Description: Ramp DZD
**********************************************************************

                         Curve Data
                        *----------*
Curve DZD-1
P.I.  Station         501+59.54  X     2,460,331.06  Y     7,021,187.39
Delta        =      1° 31' 19" (RT)
Degree       =      0° 28' 37"
Tangent      =           159.54
Length       =           319.05
Radius       =        12,012.00
External     =             1.06
Long Chord   =           319.04
Mid. Ord.    =             1.06
P.C.  Station         500+00.00  X     2,460,356.28  Y     7,021,029.86
P.T.  Station         503+19.05  X     2,460,310.03  Y     7,021,345.53
C.C.                             X     2,472,217.19  Y     7,022,929.08
Back         = N   9° 05' 50" W
Ahead        = N   7° 34' 31" W
Chord Bear   = N   8° 20' 11" W
```

HOV RAMP 2 (CONT)

```
                         Curve Data
                        *----------*
Curve DZD-2
P.I.  Station         506+66.59  X     2,460,264.21  Y     7,021,690.03
Delta        =      7° 57' 08" (LT)
Degree       =      1° 08' 45"
Tangent      =           347.53
Length       =           693.95
Radius       =         5,000.00
External     =            12.06
Long Chord   =           693.39
Mid. Ord.    =            12.03
P.C.  Station         503+19.05  X     2,460,310.03  Y     7,021,345.53
P.T.  Station         510+13.00  X     2,460,171.18  Y     7,022,024.88
C.C.                             X     2,455,353.67  Y     7,020,686.38
Back         = N   7° 34' 31" W
Ahead        = N  15° 31' 39" W
Chord Bear   = N  11° 33' 05" W

Course from PT DZD-2 to 144 N 15° 31' 39" W Dist 776.14

Point 144           X     2,459,963.41 Y     7,022,772.70 Sta      517+89.14

**********************************************************************
Ending chain RMP35M02 description
```

NB ENTRANCE RAMPS

NB ENTRANCE RAMP 3

```
Beginning chain RMP35NBN3 description
Description: Ramp C
**********************************************************************

                         Curve Data
                        *----------*
Curve C-1
P.I.  Station          11+38.98  X     2,458,992.69  Y     7,029,528.43
Delta        =      5°18' 17" (LT)
Degree       =      1°54' 35"
Tangent      =           138.98
Length       =           277.75
Radius       =         3,000.00
External     =             3.22
Long Chord   =           277.65
Mid. Ord.    =             3.21
P.C.  Station          10+00.00  X     2,459,016.70  Y     7,029,391.55
P.T.  Station          12+77.75  X     2,458,956.13  Y     7,029,662.51
C.C.                             X     2,456,061.79  Y     7,028,873.33
Back         = N   9°56' 50" W
Ahead        = N  15°15' 07" W
Chord Bear   = N  12°35' 58" W

                         Curve Data
                        *----------*
Curve C-2
P.I.  Station          13+10.18  X     2,458,947.60  Y     7,029,693.80
Delta        =      3°31' 17" (RT)
Degree       =      5°25' 51"
Tangent      =            32.43
Length       =            64.84
Radius       =         1,055.00
External     =             0.50
Long Chord   =            64.83
Mid. Ord.    =             0.50
P.C.  Station          12+77.75  X     2,458,956.13  Y     7,029,662.51
P.T.  Station          13+42.59  X     2,458,941.00  Y     7,029,725.55
C.C.                             X     2,459,973.97  Y     7,029,940.04
Back         = N  15°15' 07" W
Ahead        = N  11°43' 50" W
Chord Bear   = N  13°29' 28" W

                         Curve Data
                        *----------*
Curve C-3
P.I.  Station          14+12.56  X     2,458,926.78  Y     7,029,794.06
Delta        =      1°00' 08" (RT)
Degree       =      0°42' 58"
Tangent      =            69.96
Length       =           139.93
Radius       =         8,000.00
External     =             0.31
Long Chord   =           139.92
Mid. Ord.    =             0.31
P.C.  Station          13+42.59  X     2,458,941.00  Y     7,029,725.55
P.T.  Station          14+82.52  X     2,458,913.76  Y     7,029,862.80
C.C.                             X     2,466,773.92  Y     7,031,352.02
Back         = N  11°43' 50" W
Ahead        = N  10°43' 42" W
Chord Bear   = N  11°13' 46" W

                         Curve Data
                        *----------*
Curve C-4
P.I.  Station          15+05.96  X     2,458,909.39  Y     7,029,885.83
Delta        =      0°28' 02" (LT)
Degree       =      0°59' 47"
Tangent      =            23.44
Length       =            46.89
Radius       =         5,750.00
External     =             0.05
Long Chord   =            46.89
Mid. Ord.    =             0.05
P.C.  Station          14+82.52  X     2,458,913.76  Y     7,029,862.80
P.T.  Station          15+29.40  X     2,458,904.84  Y     7,029,908.83
C.C.                             X     2,453,264.26  Y     7,028,792.42
Back         = N  10°43' 42" W
Ahead        = N  11°11' 44" W
Chord Bear   = N  10°57' 43" W

                         Curve Data
                        *----------*
Curve C-5
P.I.  Station          16+66.67  X     2,458,878.19  Y     7,030,043.48
Delta        =      7°51' 09" (LT)
Degree       =      2°51' 53"
Tangent      =           137.27
Length       =           274.10
Radius       =         2,000.00
External     =             4.71
Long Chord   =           273.89
Mid. Ord.    =             4.69
P.C.  Station          15+29.40  X     2,458,904.84  Y     7,029,908.83
P.T.  Station          18+03.51  X     2,458,833.39  Y     7,030,173.23
C.C.                             X     2,456,942.90  Y     7,029,520.51
Back         = N  11°11' 44" W
Ahead        = N  19°02' 53" W
Chord Bear   = N  15°07' 18" W

                         Curve Data
                        *----------*
Curve C-6
P.I.  Station          18+79.17  X     2,458,808.70  Y     7,030,244.76
Delta        =      3°36' 41" (RT)
Degree       =      2°23' 14"
Tangent      =            75.66
Length       =           151.28
Radius       =         2,400.00
External     =             1.19
Long Chord   =           151.25
Mid. Ord.    =             1.19
P.C.  Station          18+03.51  X     2,458,833.39  Y     7,030,173.23
P.T.  Station          19+54.79  X     2,458,788.56  Y     7,030,317.69
C.C.                             X     2,461,101.98  Y     7,030,956.50
Back         = N  19°02' 53" W
Ahead        = N  15°26' 11" W
Chord Bear   = N  17°14' 32" W

**********************************************************************
Ending chain RMP35NBN3 description
```

NB ENTRANCE RAMP 4

```
Beginning chain RMP35NBN4 description
Description: Ramp D
**********************************************************************

                         Curve Data
                        *----------*
Curve D-1
P.I.  Station          11+85.05  X     2,454,316.77  Y     7,038,639.91
Delta        =      7°03' 35" (LT)
Degree       =      1°54' 35"
Tangent      =           185.05
Length       =           369.64
Radius       =         3,000.00
External     =             5.70
Long Chord   =           369.41
Mid. Ord.    =             5.69
P.C.  Station          10+00.00  X     2,454,397.68  Y     7,038,473.48
P.T.  Station          13+69.64  X     2,454,216.02  Y     7,038,795.13
C.C.                             X     2,451,699.65  Y     7,037,161.76
Back         = N  25°55' 40" W
Ahead        = N  32°59' 15" W
Chord Bear   = N  29°27' 27" W

Course from PT D-1 to PC D-2 N 32°59' 15" W Dist 4.49
```

NB ENTRANCE RAMP 4 (CONT)

```
                         Curve Data
                        *----------*
Curve D-2
P.I.  Station          15+60.90  X     2,454,111.88  Y     7,038,955.55
Delta        =      7°07' 30" (RT)
Degree       =      1°54' 35"
Tangent      =           186.77
Length       =           373.06
Radius       =         3,000.00
External     =             5.81
Long Chord   =           372.82
Mid. Ord.    =             5.80
P.C.  Station          13+74.13  X     2,454,213.57  Y     7,038,798.89
P.T.  Station          17+47.19  X     2,454,030.41  Y     7,039,123.62
C.C.                             X     2,456,729.94  Y     7,040,432.26
Back         = N  32°59' 15" W
Ahead        = N  25°51' 45" W
Chord Bear   = N  29°25' 30" W

Course from PT D-2 to 145 N 25°51' 45" W Dist 798.92

Point 145           X     2,453,681.91 Y     7,039,842.53 Sta       25+46.11

**********************************************************************
Ending chain RMP35NBN4 description
```

NB ENTRANCE RAMP 5

```
Beginning chain RMP35NBN5 description
Description: Ramp E
**********************************************************************

Point 146           X     2,451,314.83 Y     7,043,775.39 Sta       10+00.00

Course from 146 to PC E-1 N 39°15' 53" W Dist 513.27

                         Curve Data
                        *----------*
Curve E-1
P.I.  Station          16+05.08  X     2,450,931.87  Y     7,044,243.86
Delta        =      9°56' 49" (LT)
Degree       =      5°25' 51"
Tangent      =            91.81
Length       =           183.15
Radius       =         1,055.00
External     =             3.99
Long Chord   =           182.92
Mid. Ord.    =             3.97
P.C.  Station          15+13.27  X     2,450,989.98  Y     7,044,172.78
P.T.  Station          16+96.43  X     2,450,862.36  Y     7,044,303.84
C.C.                             X     2,450,173.17  Y     7,043,505.07
Back         = N  39°15' 53" W
Ahead        = N  49°12' 42" W
Chord Bear   = N  44°14' 17" W

                         Curve Data
                        *----------*
Curve E-2
P.I.  Station          18+20.67  X     2,450,768.29  Y     7,044,385.00
Delta        =     13°26' 01" (RT)
Degree       =      5°25' 51"
Tangent      =           124.25
Length       =           247.36
Radius       =         1,055.00
External     =             7.29
Long Chord   =           246.79
Mid. Ord.    =             7.24
P.C.  Station          16+96.43  X     2,450,862.36  Y     7,044,303.84
P.T.  Station          19+43.78  X     2,450,695.65  Y     7,044,485.80
C.C.                             X     2,451,551.56  Y     7,045,102.61
Back         = N  49°12' 42" W
Ahead        = N  35°46' 41" W
Chord Bear   = N  42°29' 41" W

**********************************************************************
Ending chain RMP35NBN5 description
```

NB ENTRANCE RAMP 6

```
Beginning chain RMP35NBN6 description
Description: Ramp F
**********************************************************************

                         Curve Data
                        *----------*
Curve F-1
P.I.  Station          11+63.77  X     2,445,658.69  Y     7,048,486.64
Delta        =      4°38' 56" (LT)
Degree       =      1°25' 57"
Tangent      =           162.36
Length       =           324.55
Radius       =         4,000.00
External     =             3.29
Long Chord   =           324.46
Mid. Ord.    =             3.29
P.C.  Station          10+01.41  X     2,445,795.37  Y     7,048,399.01
P.T.  Station          13+25.95  X     2,445,515.35  Y     7,048,562.91
C.C.                             X     2,443,636.49  Y     7,045,031.64
Back         = N  57°20' 07" W
Ahead        = N  61°59' 03" W
Chord Bear   = N  59°39' 35" W

Course from PT F-1 to PC F-2 N 61°59' 03" W Dist 166.44

                         Curve Data
                        *----------*
Curve F-2
P.I.  Station          15+84.32  X     2,445,287.26  Y     7,048,684.27
Delta        =      3°30' 37" (RT)
Degree       =      1°54' 35"
Tangent      =            91.93
Length       =           183.80
Radius       =         3,000.00
External     =             1.41
Long Chord   =           183.77
Mid. Ord.    =             1.41
P.C.  Station          14+92.39  X     2,445,368.42  Y     7,048,641.09
P.T.  Station          16+76.19  X     2,445,208.90  Y     7,048,732.34
C.C.                             X     2,446,777.57  Y     7,051,289.54
Back         = N  61°59' 03" W
Ahead        = N  58°28' 26" W
Chord Bear   = N  60°13' 44" W

Course from PT F-2 to 147 N 58°28' 26" W Dist 600.00

Point 147           X     2,444,697.46 Y     7,049,046.07 Sta       22+76.19

**********************************************************************
Ending chain RMP35NBN6 description
```

NB ENTRANCE RAMP 9

```
Beginning chain RMP35NBN9 description
Description: Ramp K
**********************************************************************

                         Curve Data
                        *----------*
Curve K-1
P.I.  Station          15+97.41  X     2,437,114.11  Y     7,053,976.88
Delta        =      4°30''37" (RT)
Degree       =      1°25''40"
Tangent      =           158.03
Length       =           315.89
Radius       =         4,013.00
External     =             3.11
Long Chord   =           315.81
Mid. Ord.    =             3.11
P.C.  Station          14+39.38  X     2,437,245.33  Y     7,053,888.82
P.T.  Station          17+55.28  X     2,436,990.22  Y     7,054,074.98
C.C.                             X     2,439,481.52  Y     7,057,221.03
Back         = N  56°08''06" W
Ahead        = N  51°37''30" W
Chord Bear   = N  53°52''48" W

                         Curve Data
                        *----------*
Curve K-2
P.I.  Station          19+75.22  X     2,436,817.79  Y     7,054,211.53
Delta        =      8°23''11" (LT)
Degree       =      1°54''35"
Tangent      =           219.94
Length       =           439.10
Radius       =         3,000.00
External     =             8.05
Long Chord   =           438.71
Mid. Ord.    =             8.03
P.C.  Station          17+55.28  X     2,436,990.22  Y     7,054,074.98
P.T.  Station          21+94.38  X     2,436,627.30  Y     7,054,321.46
C.C.                             X     2,435,127.80  Y     7,051,723.09
Back         = N  51°37''30" W
Ahead        = N  60°00''40" W
Chord Bear   = N  55°49''05" W
```

NB ENTRANCE RAMP 9 (CONT)

```
                         Curve Data
                        *-----------*
Curve K-3
P.I.  Station            25+02.80  X     2,436,360.17  Y     7,054,475.62
Delta       =        11°44' 22" (RT)
Degree      =         1°54' 35"
Tangent     =              308.42
Length      =              614.68
Radius      =            3,000.00
External    =               15.81
Long Chord  =              613.60
Mid. Ord.   =               15.73
P.C.  Station            21+94.38  X     2,436,627.30  Y     7,054,321.46
P.T.  Station            28+09.06  X     2,436,129.99  Y     7,054,680.90
C.C.                               X     2,438,126.79  Y     7,056,919.83
Back        = N  60°00' 40" W
Ahead       = N  48°16' 18" W
Chord Bear  = N  54°08' 29" W

                         Curve Data
                        *-----------*
Curve K-4
P.I.  Station            30+03.00  X     2,435,985.25  Y     7,054,809.99
Delta       =         3°17' 43" (RT)
Degree      =         0°50' 59"
Tangent     =              193.94
Length      =              387.77
Radius      =            6,742.00
External    =                2.79
Long Chord  =              387.72
Mid. Ord.   =                2.79
P.C.  Station            28+09.06  X     2,436,129.99  Y     7,054,680.90
P.T.  Station            31+96.83  X     2,435,848.17  Y     7,054,947.18
C.C.                               X     2,440,617.46  Y     7,059,712.52
Back        = N  48°16' 18" W
Ahead       = N  44°58' 35" W
Chord Bear  = N  46°37' 26" W

                         Curve Data
                        *-----------*
Curve K-5
P.I.  Station            35+92.79  X     2,435,568.30  Y     7,055,227.29
Delta       =         7°33''05" (RT)
Degree      =         0°57''18"
Tangent     =              395.96
Length      =              790.78
Radius      =            6,000.00
External    =               13.05
Long Chord  =              790.21
Mid. Ord.   =               13.02
P.C.  Station            31+96.83  X     2,435,848.17  Y     7,054,947.18
P.T.  Station            39+87.61  X     2,435,327.66  Y     7,055,541.74
C.C.                               X     2,440,092.57  Y     7,059,188.07
Back        = N  44°58''35" W
Ahead       = N  37°25''29" W
Chord Bear  = N  41°12''02" W

************************************************************************
Ending chain RMP35NBN9 description
```

NB ENTRANCE RAMP 10

```
Beginning chain RMP35NBN10 description
Description: Ramp M
************************************************************************

                         Curve Data
                        *-----------*
Curve M-1
P.I.  Station            11+81.58  X     2,433,170.17  Y     7,058,905.50
Delta       =         6°55' 39" (LT)
Degree      =         1°54' 35"
Tangent     =              181.58
Length      =              362.72
Radius      =            3,000.00
External    =                5.49
Long Chord  =              362.50
Mid. Ord.   =                5.48
P.C.  Station            10+00.00  X     2,433,269.31  Y     7,058,753.37
P.T.  Station            13+62.72  X     2,433,053.41  Y     7,059,044.56
C.C.                               X     2,430,755.88  Y     7,057,115.49
Back        = N  33°05' 25" W
Ahead       = N  40°01' 04" W
Chord Bear  = N  36°33' 14" W

Course from PT M-1 to PC M-2 N 40°01' 04" W Dist 10.72
                         Curve Data
                        *-----------*
Curve M-2
P.I.  Station            15+55.72  X     2,432,929.31  Y     7,059,192.37
Delta       =         6°57' 15" (RT)
Degree      =         1°54' 35"
Tangent     =              182.29
Length      =              364.13
Radius      =            3,000.00
External    =                5.53
Long Chord  =              363.90
Mid. Ord.   =                5.52
P.C.  Station            13+73.43  X     2,433,046.52  Y     7,059,052.77
P.T.  Station            17+37.56  X     2,432,829.86  Y     7,059,345.14
C.C.                               X     2,435,344.06  Y     7,060,981.84
Back        = N  40°01' 04" W
Ahead       = N  33°03' 48" W
Chord Bear  = N  36°32' 26" W

************************************************************************
Ending chain RMP35NBN10 description
```

NB ENTRANCE RAMP 11

```
Beginning chain RMP35NBN11 description
Description: Ramp N
************************************************************************

Point NBNM01          X     2,429,758.30 Y     7,063,211.06 Sta      10+00.00

Course from NBNM01 to PC N-1 N 52°42' 04" W Dist 24.00
                         Curve Data
                        *-----------*
Curve N-1
P.I.  Station            11+74.89  X     2,429,619.18  Y     7,063,317.04
Delta       =         8°37' 45" (RT)
Degree      =         2°51' 53"
Tangent     =              150.89
Length      =              301.21
Radius      =            2,000.00
External    =                5.68
Long Chord  =              300.93
Mid. Ord.   =                5.67
P.C.  Station            10+24.00  X     2,429,739.22  Y     7,063,225.61
P.T.  Station            13+25.21  X     2,429,514.23  Y     7,063,425.45
C.C.                               X     2,430,951.16  Y     7,064,816.58
Back        = N  52°42' 04" W
Ahead       = N  44°04' 19" W
Chord Bear  = N  48°23' 11" W

************************************************************************
Ending chain RMP35NBN11 description
```

NB ENTRANCE RAMP 12

```
Beginning chain RMP35NBN12 description
Description: Ramp P
************************************************************************

                         Curve Data
                        *-----------*
Curve P-1
P.I.  Station            10+52.84  X     2,426,589.88  Y     7,066,603.90
Delta       =         5°39''34" (LT)
Degree      =         5°21''35"
Tangent     =               52.84
Length      =              105.59
Radius      =            1,069.00
External    =                1.31
Long Chord  =              105.55
Mid. Ord.   =                1.30
P.C.  Station            10+00.00  X     2,426,620.40  Y     7,066,560.77
P.T.  Station            11+05.59  X     2,426,555.26  Y     7,066,643.81
C.C.                               X     2,425,747.76  Y     7,065,943.31
Back        = N  35°16''55" W
Ahead       = N  40°56''28" W
Chord Bear  = N  38°06''42" W

                         Curve Data
                        *-----------*
Curve P-2
P.I.  Station            11+81.23  X     2,426,505.69  Y     7,066,700.95
Delta       =         8°12''07" (RT)
Degree      =         5°25''51"
Tangent     =               75.64
Length      =              151.02
Radius      =            1,055.00
External    =                2.71
Long Chord  =              150.89
Mid. Ord.   =                2.70
P.C.  Station            11+05.59  X     2,426,555.26  Y     7,066,643.81
P.T.  Station            12+56.61  X     2,426,464.79  Y     7,066,764.58
C.C.                               X     2,427,352.19  Y     7,067,335.14
Back        = N  40°56''28" W
Ahead       = N  32°44''22" W
Chord Bear  = N  36°50''25" W
```

NB ENTRANCE RAMP 12 (CONT)

```
                         Curve Data
                        *-----------*
Curve P-3
P.I.  Station            13+76.64  X     2,426,399.87  Y     7,066,865.53
Delta       =         2°22' 45" (RT)
Degree      =         0°59' 29"
Tangent     =              120.03
Length      =              240.02
Radius      =            5,780.00
External    =                1.25
Long Chord  =              240.00
Mid. Ord.   =                1.25
P.C.  Station            12+56.61  X     2,426,464.79  Y     7,066,764.58
P.T.  Station            14+96.63  X     2,426,339.21  Y     7,066,969.10
C.C.                               X     2,431,326.57  Y     7,069,890.51
Back        = N  32°44' 22" W
Ahead       = N  30°21' 36" W
Chord Bear  = N  31°32' 59" W

                         Curve Data
                        *-----------*
Curve P-4
P.I.  Station            15+51.05  X     2,426,311.70  Y     7,067,016.06
Delta       =         3°07''02" (LT)
Degree      =         2°51''53"
Tangent     =               54.42
Length      =              108.81
Radius      =            2,000.00
External    =                0.74
Long Chord  =              108.80
Mid. Ord.   =                0.74
P.C.  Station            14+96.63  X     2,426,339.21  Y     7,066,969.10
P.T.  Station            16+05.44  X     2,426,281.68  Y     7,067,061.45
C.C.                               X     2,424,613.48  Y     7,065,958.23
Back        = N  30°21''36" W
Ahead       = N  33°28''38" W
Chord Bear  = N  31°55''07" W

                         Curve Data
                        *-----------*
Curve P-5
P.I.  Station            17+58.61  X     2,426,197.19  Y     7,067,189.21
Delta       =         5°50''44" (RT)
Degree      =         1°54''35"
Tangent     =              153.17
Length      =              306.08
Radius      =            3,000.00
External    =                3.91
Long Chord  =              305.94
Mid. Ord.   =                3.90
P.C.  Station            16+05.44  X     2,426,281.68  Y     7,067,061.45
P.T.  Station            19+11.52  X     2,426,126.16  Y     7,067,324.91
C.C.                               X     2,428,784.00  Y     7,068,716.27
Back        = N  33°28''38" W
Ahead       = N  27°37''54" W
Chord Bear  = N  30°33''16" W

                         Curve Data
                        *-----------*
Curve P-6
P.I.  Station            22+41.86  X     2,425,972.95  Y     7,067,617.58
Delta       =         9°30''48" (RT)
Degree      =         1°26''36"
Tangent     =              330.34
Length      =              659.17
Radius      =            3,970.00
External    =               13.72
Long Chord  =              658.41
Mid. Ord.   =               13.67
P.C.  Station            19+11.52  X     2,426,126.16  Y     7,067,324.91
P.T.  Station            25+70.69  X     2,425,870.22  Y     7,067,931.54
C.C.                               X     2,429,643.37  Y     7,069,166.14
Back        = N  27°37''54" W
Ahead       = N  18°07''06" W
Chord Bear  = N  22°52''30" W

                         Curve Data
                        *-----------*
Curve P-7
P.I.  Station            26+56.05  X     2,425,843.67  Y     7,068,012.67
Delta       =         3°15''35" (RT)
Degree      =         1°54''35"
Tangent     =               85.36
Length      =              170.67
Radius      =            3,000.00
External    =                1.21
Long Chord  =              170.65
Mid. Ord.   =                1.21
P.C.  Station            25+70.69  X     2,425,870.22  Y     7,067,931.54
P.T.  Station            27+41.36  X     2,425,821.78  Y     7,068,095.18
C.C.                               X     2,428,721.46  Y     7,068,864.49
Back        = N  18°07''06" W
Ahead       = N  14°51''32" W
Chord Bear  = N  16°29''19" W

************************************************************************
Ending chain RMP35NBN12 description
```

NB ENTRANCE RAMP 13

```
Beginning chain RMP35NBN13 description
Description: Ramp Q
************************************************************************

                         Curve Data
                        *-----------*
Curve Q-1
P.I.  Station            15+22.24  X     2,425,103.61  Y     7,070,939.37
Delta       =         4°33' 42" (LT)
Degree      =         1°54' 35"
Tangent     =              119.49
Length      =              238.85
Radius      =            3,000.00
External    =                2.38
Long Chord  =              238.79
Mid. Ord.   =                2.38
P.C.  Station            14+02.75  X     2,425,138.52  Y     7,070,825.09
P.T.  Station            16+41.60  X     2,425,059.72  Y     7,071,050.50
C.C.                               X     2,422,269.44  Y     7,069,948.54
Back        = N  16°59' 19" W
Ahead       = N  21°33' 02" W
Chord Bear  = N  19°16' 11" W

                         Curve Data
                        *-----------*
Curve Q-2
P.I.  Station            17+62.74  X     2,425,015.22  Y     7,071,163.18
Delta       =         4°37' 29" (RT)
Degree      =         1°54' 35"
Tangent     =              121.14
Length      =              242.15
Radius      =            3,000.00
External    =                2.44
Long Chord  =              242.09
Mid. Ord.   =                2.44
P.C.  Station            16+41.60  X     2,425,059.72  Y     7,071,050.50
P.T.  Station            18+83.75  X     2,424,979.96  Y     7,071,279.07
C.C.                               X     2,427,850.00  Y     7,072,152.46
Back        = N  21°33' 02" W
Ahead       = N  16°55' 33" W
Chord Bear  = N  19°14' 17" W

************************************************************************
Ending chain RMP35NBN13 description
```

NB ENTRANCE RAMP 14

```
Beginning chain RMP35NBN14 description
Description: Ramp R
************************************************************************

                         Curve Data
                        *-----------*
Curve R-1
P.I.  Station            11+39.84  X     2,423,496.71  Y     7,075,429.96
Delta       =         7°59''56" (LT)
Degree      =         2°51''53"
Tangent     =              139.84
Length      =              279.22
Radius      =            2,000.00
External    =                4.88
Long Chord  =              278.99
Mid. Ord.   =                4.87
P.C.  Station            10+00.00  X     2,423,560.70  Y     7,075,305.63
P.T.  Station            12+79.22  X     2,423,416.04  Y     7,075,544.19
C.C.                               X     2,421,782.39  Y     7,074,390.41
Back        = N  27°13''59" W
Ahead       = N  35°13''55" W
Chord Bear  = N  31°13''57" W

Course from PT R-1 to PC R-2 N 35°13''55" W Dist 574.01
                         Curve Data
                        *-----------*
Curve R-2
P.I.  Station            19+87.31  X     2,423,007.55  Y     7,076,122.57
Delta       =         5°07''06" (RT)
Degree      =         1°54''35"
Tangent     =              134.09
Length      =              267.99
Radius      =            3,000.00
External    =                3.00
Long Chord  =              267.91
Mid. Ord.   =                2.99
P.C.  Station            18+53.23  X     2,423,084.90  Y     7,076,013.05
P.T.  Station            21+21.22  X     2,422,940.28  Y     7,076,238.56
C.C.                               X     2,425,535.37  Y     7,077,743.71
Back        = N  35°13''55" W
Ahead       = N  30°06''49" W
Chord Bear  = N  32°40''22" W

************************************************************************
Ending chain RMP35NBN14 description
```

NB ENTRANCE RAMP 15

```
Beginning chain RMP35NBN15 description
Description: Ramp S
************************************************************************

                         Curve Data
                        *-----------*
Curve S-1
P.I.  Station            11+43.53  X     2,421,944.11  Y     7,077,919.05
Delta       =         5°28' 41" (LT)
Degree      =         1°54' 35"
Tangent     =              143.53
Length      =              286.83
Radius      =            3,000.00
External    =                3.43
Long Chord  =              286.72
Mid. Ord.   =                3.43
P.C.  Station            10+00.00  X     2,422,026.83  Y     7,077,801.77
P.T.  Station            12+86.83  X     2,421,850.56  Y     7,078,027.90
C.C.                               X     2,419,575.33  Y     7,076,072.57
Back        = N  35°11' 52" W
Ahead       = N  40°40' 33" W
Chord Bear  = N  37°56' 12" W

                         Curve Data
                        *-----------*
Curve S-2
P.I.  Station            15+36.02  X     2,421,688.15  Y     7,078,216.89
Delta       =         9°29' 47" (RT)
Degree      =         1°54' 35"
Tangent     =              249.19
Length      =              497.23
Radius      =            3,000.00
External    =               10.33
Long Chord  =              496.66
Mid. Ord.   =               10.30
P.C.  Station            12+86.83  X     2,421,850.56  Y     7,078,027.90
P.T.  Station            17+84.06  X     2,421,559.14  Y     7,078,430.08
C.C.                               X     2,424,125.79  Y     7,079,983.24
Back        = N  40°40' 33" W
Ahead       = N  31°10' 46" W
Chord Bear  = N  35°55' 40" W

************************************************************************
Ending chain RMP35NBN15 description
```

NB ENTRANCE RAMP 16

```
Beginning chain RMP35NBN16 description
Description: Ramp T
************************************************************************

                         Curve Data
                        *-----------*
Curve T-1
P.I.  Station            11+46.46  X     2,419,800.27  Y     7,083,633.58
Delta       =        5° 35''23" (LT)
Degree      =        1° 54''35"
Tangent     =              146.46
Length      =              292.68
Radius      =            3,000.00
External    =                3.57
Long Chord  =              292.57
Mid. Ord.   =                3.57
P.C.  Station            10+00.00  X     2,419,823.90  Y     7,083,489.04
P.T.  Station            12+92.68  X     2,419,762.67  Y     7,083,775.12
C.C.                               X     2,416,863.23  Y     7,083,004.88
Back        = N   9° 17''15" W
Ahead       = N  14° 52''38" W
Chord Bear  = N  12° 04''56" W

                         Curve Data
                        *-----------*
Curve T-2
P.I.  Station            14+09.39  X     2,419,732.70  Y     7,083,887.92
Delta       =        4° 27''20" (RT)
Degree      =        1° 54''35"
Tangent     =              116.71
Length      =              233.29
Radius      =            3,000.00
External    =                2.27
Long Chord  =              233.23
Mid. Ord.   =                2.27
P.C.  Station            12+92.68  X     2,419,762.67  Y     7,083,775.12
P.T.  Station            15+25.98  X     2,419,711.59  Y     7,084,002.70
C.C.                               X     2,422,662.10  Y     7,084,545.37
Back        = N  14° 52''38" W
Ahead       = N  10° 25''18" W
Chord Bear  = N  12° 38''58" W

Course from PT T-2 to PC T-3 N 10° 25''18" W Dist 125.17
                         Curve Data
                        *-----------*
Curve T-3
P.I.  Station            21+13.59  X     2,419,605.29  Y     7,084,580.62
Delta       =        4° 46''32" (RT)
Degree      =        0° 31''00"
Tangent     =              462.45
Length      =              924.37
Radius      =           11,090.00
External    =                9.64
Long Chord  =              924.10
Mid. Ord.   =                9.63
P.C.  Station            16+51.14  X     2,419,688.95  Y     7,084,125.80
P.T.  Station            25+75.51  X     2,419,559.80  Y     7,085,040.83
C.C.                               X     2,430,596.00  Y     7,086,131.89
Back        = N  10° 25''18" W
Ahead       = N   5° 38''46" W
Chord Bear  = N   8° 02''02" W

************************************************************************
Ending chain RMP35NBN16 description
```

NB ENTRANCE RAMP 18

```
Beginning chain RMP35NBN18 description
Description: Ramp BC
************************************************************************

                         Curve Data
                        *-----------*
Curve V-1
P.I.  Station            11+05.04  X     2,413,954.49  Y     7,100,660.47
Delta       =        4° 00' 38" (LT)
Degree      =        1° 54' 35"
Tangent     =              105.04
Length      =              210.00
Radius      =            3,000.00
External    =                1.84
Long Chord  =              209.95
Mid. Ord.   =                1.84
P.C.  Station            10+00.00  X     2,414,022.88  Y     7,100,580.74
P.T.  Station            12+10.00  X     2,413,880.70  Y     7,100,735.22
C.C.                               X     2,411,745.77  Y     7,098,627.59
Back        = N  40° 37' 14" W
Ahead       = N  44° 37' 53" W
Chord Bear  = N  42° 37' 33" W

                         Curve Data
                        *-----------*
Curve V-2
P.I.  Station            13+13.17  X     2,413,808.21  Y     7,100,808.65
Delta       =        3° 56' 23" (RT)
Degree      =        1° 54' 35"
Tangent     =              103.18
Length      =              206.28
Radius      =            3,000.00
External    =                1.77
Long Chord  =              206.24
Mid. Ord.   =                1.77
P.C.  Station            12+10.00  X     2,413,880.70  Y     7,100,735.22
P.T.  Station            14+16.27  X     2,413,740.94  Y     7,100,886.88
C.C.                               X     2,416,015.62  Y     7,102,842.84
Back        = N  44° 37' 53" W
Ahead       = N  40° 41' 30" W
Chord Bear  = N  42° 39' 41" W

Course from PT V-2 to PC V-3 N 40° 41' 30" W Dist 240.00
                         Curve Data
                        *-----------*
Curve V-3
P.I.  Station            17+49.56  X     2,413,523.64  Y     7,101,139.58
Delta       =        3° 33' 43" (LT)
Degree      =        1° 54' 35"
Tangent     =               93.28
Length      =              186.50
Radius      =            3,000.00
External    =                1.45
Long Chord  =              186.47
Mid. Ord.   =                1.45
P.C.  Station            16+56.27  X     2,413,584.46  Y     7,101,068.86
P.T.  Station            18+42.78  X     2,413,458.54  Y     7,101,206.40
C.C.                               X     2,411,309.77  Y     7,099,112.89
Back        = N  40° 41' 30" W
Ahead       = N  44° 15' 13" W
Chord Bear  = N  42° 28' 21" W

                         Curve Data
                        *-----------*
Curve V-4
P.I.  Station            19+06.04  X     2,413,414.40  Y     7,101,251.71
Delta       =        2° 24' 58" (RT)
Degree      =        1° 54' 35"
Tangent     =               63.27
Length      =              126.51
Radius      =            3,000.00
External    =                0.67
Long Chord  =              126.50
Mid. Ord.   =                0.67
P.C.  Station            18+42.78  X     2,413,458.54  Y     7,101,206.40
P.T.  Station            19+69.29  X     2,413,372.20  Y     7,101,298.85
C.C.                               X     2,415,607.32  Y     7,103,299.91
Back        = N  44° 15' 13" W
Ahead       = N  41° 50' 15" W
Chord Bear  = N  43° 02' 44" W
```

NB ENTRANCE RAMP 18 (CONT)

```
Course from PT V-4 to PC V-5 N 41° 50' 15" W Dist 191.55
                         Curve Data
                        *-----------*
Curve V-5
P.I.  Station            23+83.31  X     2,413,096.04  Y     7,101,607.31
Delta       =        1° 16' 47" (RT)
Degree      =        0° 17' 15"
Tangent     =              222.47
Length      =              444.93
Radius      =           19,920.00
External    =                1.24
Long Chord  =              444.92
Mid. Ord.   =                1.24
P.C.  Station            21+60.84  X     2,413,244.43  Y     7,101,441.56
P.T.  Station            26+05.77  X     2,412,951.38  Y     7,101,776.34
C.C.                               X     2,428,085.64  Y     7,114,728.58
Back        = N  41° 50' 15" W
Ahead       = N  40° 33' 28" W
Chord Bear  = N  41° 11' 51" W

Course from PT V-5 to 23 N 40° 33' 28" W Dist 413.57

Point 23              X     2,412,682.47 Y     7,102,090.55 Sta      30+19.33

************************************************************************
Ending chain RMP35NBN18 description
```

NB ENTRANCE RAMP 19

```
Beginning chain RMP35NBN19 description
Description: Ramp W
************************************************************************

                         Curve Data
                        *-----------*
Curve W-1
P.I.  Station            11+26.55  X     2,412,505.38  Y     7,102,379.61
Delta       =         4°49' 52" (LT)
Degree      =         1°54' 35"
Tangent     =              126.55
Length      =              252.96
Radius      =            3,000.00
External    =                2.67
Long Chord  =              252.88
Mid. Ord.   =                2.67
P.C.  Station            10+00.00  X     2,412,585.87  Y     7,102,281.95
P.T.  Station            12+52.96  X     2,412,416.96  Y     7,102,470.15
C.C.                               X     2,410,270.69  Y     7,100,374.08
Back        = N  39°29' 27" W
Ahead       = N  44°19' 20" W
Chord Bear  = N  41°54' 24" W

                         Curve Data
                        *-----------*
Curve W-2
P.I.  Station            12+98.19  X     2,412,385.36  Y     7,102,502.51
Delta       =         4°54' 37" (RT)
Degree      =         5°25' 51"
Tangent     =               45.23
Length      =               90.41
Radius      =            1,055.00
External    =                0.97
Long Chord  =               90.39
Mid. Ord.   =                0.97
P.C.  Station            12+52.96  X     2,412,416.96  Y     7,102,470.15
P.T.  Station            13+43.37  X     2,412,356.64  Y     7,102,537.46
C.C.                               X     2,413,171.73  Y     7,103,207.27
Back        = N  44°19' 20" W
Ahead       = N  39°24' 43" W
Chord Bear  = N  41°52' 01" W

Course from PT W-2 to PC W-3 N 39°24' 43" W Dist 299.97
                         Curve Data
                        *-----------*
Curve W-3
P.I.  Station            17+19.25  X     2,412,118.00  Y     7,102,827.86
Delta       =         4°20' 49" (LT)
Degree      =         2°51' 53"
Tangent     =               75.91
Length      =              151.74
Radius      =            2,000.00
External    =                1.44
Long Chord  =              151.70
Mid. Ord.   =                1.44
P.C.  Station            16+43.35  X     2,412,166.19  Y     7,102,769.22
P.T.  Station            17+95.08  X     2,412,065.50  Y     7,102,882.69
C.C.                               X     2,410,620.98  Y     7,101,499.44
Back        = N  39°24' 43" W
Ahead       = N  43°45' 32" W
Chord Bear  = N  41°35' 07" W

                         Curve Data
                        *-----------*
Curve W-4
P.I.  Station            18+87.49  X     2,412,001.59  Y     7,102,949.43
Delta       =         3°31' 43" (RT)
Degree      =         1°54' 35"
Tangent     =               92.41
Length      =              184.75
Radius      =            3,000.00
External    =                1.42
Long Chord  =              184.72
Mid. Ord.   =                1.42
P.C.  Station            17+95.08  X     2,412,065.50  Y     7,102,882.69
P.T.  Station            19+79.84  X     2,411,941.91  Y     7,103,019.98
C.C.                               X     2,414,232.27  Y     7,104,957.56
Back        = N  43°45' 32" W
Ahead       = N  40°13' 49" W
Chord Bear  = N  41°59' 41" W

Course from PT W-4 to NBNV02 N 40°13' 49" W Dist 1,254.71

Point NBNV02          X     2,411,131.53 Y     7,103,977.89 Sta      32+34.55

************************************************************************
Ending chain RMP35NBN19 description
```

NB ENTRANCE RAMP 23

NB ENTRANCE RAMP 23 (CONT)

NB ENTRANCE RAMP 25

```
Beginning chain RMP35NBN25 description
Description: Ramp AC
************************************************************************

Point NBNZB01         X     2,388,534.62 Y     7,121,383.75 Sta      10+00.00

Course from NBNZB01 to PC AC-1 S 85°51' 11" W Dist 5.61
                         Curve Data
                        *-----------*
Curve AC-1
P.I.  Station            11+01.96  X     2,388,432.92  Y     7,121,376.37
Delta       =        18°14' 42" (RT)
Degree      =         9°32' 57"
Tangent     =               96.35
Length      =              191.06
Radius      =              600.00
External    =                7.69
Long Chord  =              190.26
Mid. Ord.   =                7.59
P.C.  Station            10+05.61  X     2,388,529.02  Y     7,121,383.34
P.T.  Station            11+96.68  X     2,388,339.48  Y     7,121,399.84
C.C.                               X     2,388,485.63  Y     7,121,981.77
Back        = S  85°51' 11" W
Ahead       = N  75°54' 06" W
Chord Bear  = N  85°01' 27" W

************************************************************************
Ending chain RMP35NBN25 description
```

NB ENTRANCE RAMP 26

```
Beginning chain RMP35NBN26 description
Description: Ramp AD
************************************************************************

                         Curve Data
                        *-----------*
Curve AD-1
P.I.  Station            13+91.88  X     2,383,856.96  Y     7,122,837.02
Delta       =         5°59''14" (LT)
Degree      =         1°54''35"
Tangent     =              156.89
Length      =              313.49
Radius      =            3,000.00
External    =                4.10
Long Chord  =              313.35
Mid. Ord.   =                4.09
P.C.  Station            12+34.99  X     2,383,973.15  Y     7,122,731.60
P.T.  Station            15+48.49  X     2,383,730.41  Y     7,122,929.75
C.C.                               X     2,381,957.26  Y     7,120,509.84
Back        = N  47°46''52" W
Ahead       = N  53°46''07" W
Chord Bear  = N  50°46''30" W
                         Curve Data
                        *-----------*
Curve AD-2
P.I.  Station            17+02.63  X     2,383,606.08  Y     7,123,020.86
Delta       =         5°52''57" (RT)
Degree      =         1°54''35"
Tangent     =              154.14
Length      =              308.01
Radius      =            3,000.00
External    =                3.96
Long Chord  =              307.87
Mid. Ord.   =                3.95
P.C.  Station            15+48.49  X     2,383,730.41  Y     7,122,929.75
P.T.  Station            18+56.50  X     2,383,491.73  Y     7,123,124.22
C.C.                               X     2,385,503.56  Y     7,125,349.66
Back        = N  53°46''07" W
Ahead       = N  47°53''10" W
Chord Bear  = N  50°49''38" W

************************************************************************
Ending chain RMP35NBN26 description
```

NB ENTRANCE RAMP 28

NB ENTRANCE RAMP 29

```
Beginning chain RMP35NBN29 description
Description: Ramp AH
***************************************************************************

                              Curve Data
                             *----------*
Curve AH-1
P.I.  Station            13+05.43  X       2,375,762.80  Y       7,129,333.55
Delta        =       10°04' 32" (RT)
Degree       =        1°39' 13"
Tangent      =           305.43
Length       =           609.29
Radius       =         3,464.77
External     =            13.44
Long Chord   =           608.50
Mid. Ord.    =            13.38
P.C.  Station            10+00.00  X       2,375,904.21  Y       7,129,062.83
P.T.  Station            16+09.29  X       2,375,670.93  Y       7,129,624.84
C.C.                               X       2,378,975.25  Y       7,130,667.01
Back         = N  27°34' 51" W
Ahead        = N  17°30' 18" W
Chord Bear   = N  22°32' 34" W

Course from PT AH-1 to 152 N 17°30' 18" W Dist 1,540.31

Point 152             X     2,375,207.62 Y     7,131,093.82 Sta      31+49.60

***************************************************************************
Ending chain RMP35NBN29 description
```

NB ENTRANCE RAMP 30

```
Beginning chain RMP35NBN30 description
Description: Ramp AJ
***************************************************************************

Point NBNZG01         X     2,375,329.83 Y     7,130,835.64 Sta      10+00.00

Course from NBNZG01 to PC AJ-1 N 22°37' 52" W Dist 143.88

                              Curve Data
                             *----------*
Curve AJ-1
P.I.  Station            13+07.23  X       2,375,211.61  Y       7,131,119.21
Delta        =        6°14' 00" (RT)
Degree       =        1°54' 35"
Tangent      =           163.35
Length       =           326.38
Radius       =         3,000.00
External     =             4.44
Long Chord   =           326.22
Mid. Ord.    =             4.44
P.C.  Station            11+43.88  X       2,375,274.47  Y       7,130,968.44
P.T.  Station            14+70.26  X       2,375,165.50  Y       7,131,275.92
C.C.                               X       2,378,043.47  Y       7,132,122.83
Back         = N  22°37' 52" W
Ahead        = N  16°23' 52" W
Chord Bear   = N  19°30' 52" W

***************************************************************************
Ending chain RMP35NBN30 description
```

NB ENTRANCE RAMP 31

```
Beginning chain RMP35NBN31 description
Description: Ramp AJA
***************************************************************************

                              Curve Data
                             *----------*
Curve AJA-1
P.I.  Station          1001+68.98  X       2,460,776.19  Y       7,018,612.13
Delta        =       32°38' 46" (RT)
Degree       =        9°55' 48"
Tangent      =           168.98
Length       =           328.76
Radius       =           577.00
External     =            24.23
Long Chord   =           324.34
Mid. Ord.    =            23.26
P.C.  Station          1000+00.00  X       2,460,918.16  Y       7,018,520.49
P.T.  Station          1003+28.76  X       2,460,706.09  Y       7,018,765.89
C.C.                               X       2,461,231.10  Y       7,019,005.25
Back         = N  57°09' 22" W
Ahead        = N  24°30' 36" W
Chord Bear   = N  40°49' 59" W
                              Curve Data
                             *----------*
Curve AJA-2
P.I.  Station          1003+82.55  X       2,460,683.78  Y       7,018,814.82
Delta        =       12°02' 22" (RT)
Degree       =       11°14' 04"
Tangent      =            53.78
Length       =           107.17
Radius       =           510.00
External     =             2.83
Long Chord   =           106.97
Mid. Ord.    =             2.81
P.C.  Station          1003+28.76  X       2,460,706.09  Y       7,018,765.89
P.T.  Station          1004+35.93  X       2,460,672.17  Y       7,018,867.33
C.C.                               X       2,461,170.14  Y       7,018,977.46
Back         = N  24°30' 36" W
Ahead        = N  12°28' 14" W
Chord Bear   = N  18°29' 25" W

                              Curve Data
                             *----------*
Curve AJA-3
P.I.  Station          1006+67.91  X       2,460,622.07  Y       7,019,093.84
Delta        =        5°54' 59" (RT)
Degree       =        1°16' 35"
Tangent      =           231.98
Length       =           463.55
Radius       =         4,489.00
External     =             5.99
Long Chord   =           463.34
Mid. Ord.    =             5.98
P.C.  Station          1004+35.93  X       2,460,672.17  Y       7,018,867.33
P.T.  Station          1008+99.48  X       2,460,595.60  Y       7,019,324.30
C.C.                               X       2,465,055.26  Y       7,019,836.67
Back         = N  12°28' 14" W
Ahead        = N   6°33' 14" W
Chord Bear   = N   9°30' 44" W

***************************************************************************
Ending chain RMP35NBN31 description
```

NB ENTRANCE RAMP 32

```
Beginning chain RMP35NBN32 description
Description: Ramp AJB
***************************************************************************

                              Curve Data
                             *----------*
Curve AJB-1
P.I.  Station            11+18.76  X       2,419,668.40  Y       7,090,788.41
Delta        =        4°32' 03" (RT)
Degree       =        1°54' 35"
Tangent      =           118.76
Length       =           237.40
Radius       =         3,000.00
External     =             2.35
Long Chord   =           237.34
Mid. Ord.    =             2.35
P.C.  Station            10+00.00  X       2,419,675.59  Y       7,090,669.87
P.T.  Station            12+37.40  X       2,419,670.60  Y       7,090,907.16
C.C.                               X       2,422,670.09  Y       7,090,851.49
Back         = N   3°28' 15" W
Ahead        = N   1°03' 48" E
Chord Bear   = N   1°12' 13" W

                              Curve Data
                             *----------*
Curve AJB-2
P.I.  Station            18+00.05  X       2,419,681.04  Y       7,091,469.71
Delta        =       21°14' 41" (LT)
Degree       =        1°54' 35"
Tangent      =           562.65
Length       =         1,112.37
Radius       =         3,000.00
External     =            52.31
Long Chord   =         1,106.01
Mid. Ord.    =            51.41
P.C.  Station            12+37.40  X       2,419,670.60  Y       7,090,907.16
P.T.  Station            23+49.78  X       2,419,486.93  Y       7,091,997.81
C.C.                               X       2,416,671.12  Y       7,090,962.83
Back         = N   1°03' 48" E
Ahead        = N  20°10' 53" W
Chord Bear   = N   9°33' 33" W

***************************************************************************
Ending chain RMP35NBN32 description
```

NB ENTRANCE RAMP 103

```
Beginning chain RMP35NBN103 description
Description: Ramp ZC
***************************************************************************

                              Curve Data
                             *----------*
Curve ZC-1
P.I.  Station            11+23.44  X       2,417,017.45  Y       7,096,703.45
Delta        =        4° 42' 44" (LT)
Degree       =        1° 54' 35"
Tangent      =           123.44
Length       =           246.73
Radius       =         3,000.00
External     =             2.54
Long Chord   =           246.66
Mid. Ord.    =             2.54
P.C.  Station            10+00.00  X       2,417,079.03  Y       7,096,596.47
P.T.  Station            12+46.73  X       2,416,947.29  Y       7,096,805.01
C.C.                               X       2,414,478.98  Y       7,095,099.90
Back         = N  29° 55' 28" W
Ahead        = N  34° 38' 12" W
Chord Bear   = N  32° 16' 50" W

                              Curve Data
                             *----------*
Curve ZC-2
P.I.  Station            13+53.47  X       2,416,886.63  Y       7,096,892.83
Delta        =        4° 04' 31" (RT)
Degree       =        1° 54' 35"
Tangent      =           106.74
Length       =           213.39
Radius       =         3,000.00
External     =             1.90
Long Chord   =           213.34
Mid. Ord.    =             1.90
P.C.  Station            12+46.73  X       2,416,947.29  Y       7,096,805.01
P.T.  Station            14+60.12  X       2,416,832.35  Y       7,096,984.74
C.C.                               X       2,419,415.61  Y       7,098,510.13
Back         = N  34° 38' 12" W
Ahead        = N  30° 33' 41" W
Chord Bear   = N  32° 35' 57" W

Course from PT ZC-2 to PC ZC-3 N 30° 33' 41" W Dist 74.68
                              Curve Data
                             *----------*
Curve ZC-3
P.I.  Station            16+54.45  X       2,416,733.54  Y       7,097,152.08
Delta        =        4° 34' 04" (LT)
Degree       =        1° 54' 35"
Tangent      =           119.65
Length       =           239.17
Radius       =         3,000.00
External     =             2.39
Long Chord   =           239.11
Mid. Ord.    =             2.38
P.C.  Station            15+34.80  X       2,416,794.38  Y       7,097,049.05
P.T.  Station            17+73.97  X       2,416,664.70  Y       7,097,249.93
C.C.                               X       2,414,211.13  Y       7,095,523.67
Back         = N  30° 33' 41" W
Ahead        = N  35° 07' 45" W
Chord Bear   = N  32° 50' 43" W

                              Curve Data
                             *----------*
Curve ZC-4
P.I.  Station            18+72.11  X       2,416,608.22  Y       7,097,330.20
Delta        =        3° 44' 50" (RT)
Degree       =        1° 54' 35"
Tangent      =            98.14
Length       =           196.21
Radius       =         3,000.00
External     =             1.60
Long Chord   =           196.17
Mid. Ord.    =             1.60
P.C.  Station            17+73.97  X       2,416,664.70  Y       7,097,249.93
P.T.  Station            19+70.18  X       2,416,557.12  Y       7,097,413.98
C.C.                               X       2,419,118.26  Y       7,098,976.20
Back         = N  35° 07' 45" W
Ahead        = N  31° 22' 55" W
Chord Bear   = N  33° 15' 20" W
                              Curve Data
                             *----------*
Curve ZC-5
P.I.  Station            24+35.22  X       2,416,314.96  Y       7,097,810.99
Delta        =        7° 31' 36" (LT)
Degree       =        0° 48' 37"
Tangent      =           465.04
Length       =           928.74
Radius       =         7,070.00
External     =            15.28
Long Chord   =           928.07
Mid. Ord.    =            15.24
P.C.  Station            19+70.18  X       2,416,557.12  Y       7,097,413.98
P.T.  Station            28+98.92  X       2,416,022.88  Y       7,098,172.86
C.C.                               X       2,410,521.36  Y       7,093,732.34
Back         = N  31° 22' 55" W
Ahead        = N  38° 54' 31" W
Chord Bear   = N  35° 08' 43" W

***************************************************************************
Ending chain RMP35NBN103 description
```

NB ENTRANCE RAMP 107

```
Beginning chain RMP35NBN107 description
Description: Ramp ZG
***************************************************************************

                              Curve Data
                             *----------*
Curve ZG-1
P.I.  Station            11+46.76  X       2,406,817.32  Y       7,108,816.66
Delta        =        5° 36''05" (LT)
Degree       =        1° 54''35"
Tangent      =           146.76
Length       =           293.29
Radius       =         3,000.00
External     =             3.59
Long Chord   =           293.17
Mid. Ord.    =             3.58
P.C.  Station            10+00.00  X       2,406,936.03  Y       7,108,730.37
P.T.  Station            12+93.29  X       2,406,690.76  Y       7,108,890.96
C.C.                               X       2,405,172.01  Y       7,106,303.80
Back         = N  53° 59''03" W
Ahead        = N  59° 35''08" W
Chord Bear   = N  56° 47''06" W

                              Curve Data
                             *----------*
Curve ZG-2
P.I.  Station            14+00.11  X       2,406,598.63  Y       7,108,945.04
Delta        =        4° 04''43" (RT)
Degree       =        1° 54''35"
Tangent      =           106.82
Length       =           213.56
Radius       =         3,000.00
External     =             1.90
Long Chord   =           213.51
Mid. Ord.    =             1.90
P.C.  Station            12+93.29  X       2,406,690.76  Y       7,108,890.96
P.T.  Station            15+06.85  X       2,406,510.59  Y       7,109,005.54
C.C.                               X       2,408,209.51  Y       7,111,478.12
Back         = N  59° 35''08" W
Ahead        = N  55° 30''25" W
Chord Bear   = N  57° 32''47" W

Course from PT ZG-2 to PC ZG-3 N 55° 30''25" W Dist 256.13
                              Curve Data
                             *----------*
Curve ZG-3
P.I.  Station            18+57.39  X       2,406,221.68  Y       7,109,204.05
Delta        =        3° 36''18" (LT)
Degree       =        1° 54''35"
Tangent      =            94.41
Length       =           188.76
Radius       =         3,000.00
External     =             1.49
Long Chord   =           188.72
Mid. Ord.    =             1.48
P.C.  Station            17+62.98  X       2,406,299.49  Y       7,109,150.59
P.T.  Station            19+51.73  X       2,406,140.66  Y       7,109,252.52
C.C.                               X       2,404,600.57  Y       7,106,678.00
Back         = N  55° 30''25" W
Ahead        = N  59° 06''43" W
Chord Bear   = N  57° 18''34" W

                              Curve Data
                             *----------*
Curve ZG-4
P.I.  Station            20+90.60  X       2,406,021.48  Y       7,109,323.81
Delta        =        5° 18''02" (RT)
Degree       =        1° 54''35"
Tangent      =           138.87
Length       =           277.54
Radius       =         3,000.00
External     =             3.21
Long Chord   =           277.44
Mid. Ord.    =             3.21
P.C.  Station            19+51.73  X       2,406,140.66  Y       7,109,252.52
P.T.  Station            22+29.28  X       2,405,909.41  Y       7,109,405.80
C.C.                               X       2,407,680.74  Y       7,111,827.03
Back         = N  59° 06''43" W
Ahead        = N  53° 48''41" W
Chord Bear   = N  56° 27''42" W

***************************************************************************
Ending chain RMP35NBN107 description
```

NB ENTRANCE RAMP 109

```
Beginning chain RMP35NBN109 description
Description: Ramp ZJ
***************************************************************************

Point 26              X     2,401,695.67 Y     7,112,761.58 Sta      10+00.00

Course from 26 to PC ZJ-1 N 50° 24''19" W Dist 617.81
                              Curve Data
                             *----------*
Curve ZJ-1
P.I.  Station            17+37.28  X       2,401,127.54  Y       7,113,231.48
Delta        =        4° 33''39" (LT)
Degree       =        1° 54''35"
Tangent      =           119.47
Length       =           238.81
Radius       =         3,000.00
External     =             2.38
Long Chord   =           238.75
Mid. Ord.    =             2.38
P.C.  Station            16+17.81  X       2,401,219.60  Y       7,113,155.34
P.T.  Station            18+56.62  X       2,401,029.72  Y       7,113,300.07
C.C.                               X       2,399,307.55  Y       7,110,843.62
Back         = N  50° 24''19" W
Ahead        = N  54° 57''59" W
Chord Bear   = N  52° 41''09" W

                              Curve Data
                             *----------*
Curve ZJ-2
P.I.  Station            19+76.09  X       2,400,931.90  Y       7,113,368.65
Delta        =        4° 33''39" (RT)
Degree       =        1° 54''35"
Tangent      =           119.47
Length       =           238.81
Radius       =         3,000.00
External     =             2.38
Long Chord   =           238.75
Mid. Ord.    =             2.38
P.C.  Station            18+56.62  X       2,401,029.72  Y       7,113,300.07
P.T.  Station            20+95.43  X       2,400,839.84  Y       7,113,444.79
C.C.                               X       2,402,751.90  Y       7,115,756.51
Back         = N  54° 57''59" W
Ahead        = N  50° 24''19" W
Chord Bear   = N  52° 41''09" W

***************************************************************************
Ending chain RMP35NBN109 description
```

NB ENTRANCE RAMP 111

NB ENTRANCE RAMP 202

```
Beginning chain RMP35NBN202 description
Description: Ramp XB
***************************************************************************

                              Curve Data
                             *----------*
Curve XB-1
P.I.  Station            11+97.52  X       2,443,476.77  Y       7,049,866.68
Delta        =        2° 49' 43" (LT)
Degree       =        0° 42' 58"
Tangent      =           197.52
Length       =           394.96
Radius       =         8,000.00
External     =             2.44
Long Chord   =           394.92
Mid. Ord.    =             2.44
P.C.  Station            10+00.00  X       2,443,643.04  Y       7,049,760.05
P.T.  Station            13+94.96  X       2,443,305.44  Y       7,049,964.97
C.C.                               X       2,439,324.42  Y       7,043,025.84
Back         = N  57° 19' 41" W
Ahead        = N  60° 09' 25" W
Chord Bear   = N  58° 44' 33" W

                              Curve Data
                             *----------*
Curve XB-2
P.I.  Station            14+69.04  X       2,443,241.19  Y       7,050,001.83
Delta        =        2° 49' 43" (RT)
Degree       =        1° 54' 35"
Tangent      =            74.07
Length       =           148.11
Radius       =         3,000.00
External     =             0.91
Long Chord   =           148.10
Mid. Ord.    =             0.91
P.C.  Station            13+94.96  X       2,443,305.44  Y       7,049,964.97
P.T.  Station            15+43.08  X       2,443,178.84  Y       7,050,041.81
C.C.                               X       2,444,798.32  Y       7,052,567.14
Back         = N  60° 09' 25" W
Ahead        = N  57° 19' 41" W
Chord Bear   = N  58° 44' 33" W

Course from PT XB-2 to PC XB-3 N 57° 19' 41" W Dist 400.00

                              Curve Data
                             *----------*
Curve XB-3
P.I.  Station            20+62.54  X       2,442,741.56  Y       7,050,322.24
Delta        =        4° 33' 39" (LT)
Degree       =        1° 54' 35"
Tangent      =           119.47
Length       =           238.81
Radius       =         3,000.00
External     =             2.38
Long Chord   =           238.75
Mid. Ord.    =             2.38
P.C.  Station            19+43.08  X       2,442,842.13  Y       7,050,257.75
P.T.  Station            21+81.89  X       2,442,636.19  Y       7,050,378.53
C.C.                               X       2,441,222.65  Y       7,047,732.42
Back         = N  57° 19' 41" W
Ahead        = N  61° 53' 21" W
Chord Bear   = N  59° 36' 31" W
```

NB ENTRANCE RAMP 202 (CONT)

```
                              Curve Data
                             *----------*
Curve XB-4
P.I.  Station            23+01.35  X       2,442,530.81  Y       7,050,434.82
Delta        =        4° 33' 39" (RT)
Degree       =        1° 54' 35"
Tangent      =           119.47
Length       =           238.81
Radius       =         3,000.00
External     =             2.38
Long Chord   =           238.75
Mid. Ord.    =             2.38
P.C.  Station            21+81.89  X       2,442,636.19  Y       7,050,378.53
P.T.  Station            24+20.70  X       2,442,430.25  Y       7,050,499.31
C.C.                               X       2,444,049.73  Y       7,053,024.64
Back         = N  61° 53' 21" W
Ahead        = N  57° 19' 41" W
Chord Bear   = N  59° 36' 31" W

***************************************************************************
Ending chain RMP35NBN202 description
```

NB ENTRANCE RAMP 204

```
Beginning chain RMP35NBN204 description
Description: Ramp XD
***************************************************************************

                              Curve Data
                             *----------*
Curve XD-1
P.I.  Station            10+89.54  X       2,445,964.87  Y       7,048,331.98
Delta        =        3° 25''10" (LT)
Degree       =        1° 54''35"
Tangent      =            89.54
Length       =           179.04
Radius       =         3,000.00
External     =             1.34
Long Chord   =           179.01
Mid. Ord.    =             1.34
P.C.  Station            10+00.00  X       2,446,040.25  Y       7,048,283.64
P.T.  Station            11+79.04  X       2,445,886.75  Y       7,048,375.74
C.C.                               X       2,444,420.77  Y       7,045,758.32
Back         = N  57° 19''41" W
Ahead        = N  60° 44''51" W
Chord Bear   = N  59° 02''16" W

                              Curve Data
                             *----------*
Curve XD-2
P.I.  Station            12+68.58  X       2,445,808.62  Y       7,048,419.50
Delta        =        3° 25''10" (RT)
Degree       =        1° 54''35"
Tangent      =            89.54
Length       =           179.04
Radius       =         3,000.00
External     =             1.34
Long Chord   =           179.01
Mid. Ord.    =             1.34
P.C.  Station            11+79.04  X       2,445,886.75  Y       7,048,375.74
P.T.  Station            13+58.07  X       2,445,733.25  Y       7,048,467.83
C.C.                               X       2,447,352.73  Y       7,050,993.16
Back         = N  60° 44''51" W
Ahead        = N  57° 19''41" W
Chord Bear   = N  59° 02''16" W

Course from PT XD-2 to PC XD-3 N 57° 19''41" W Dist 100.00

                              Curve Data
                             *----------*
Curve XD-3
P.I.  Station            15+07.78  X       2,445,607.23  Y       7,048,548.65
Delta        =        1° 53''55" (LT)
Degree       =        1° 54''35"
Tangent      =            49.71
Length       =            99.41
Radius       =         3,000.00
External     =             0.41
Long Chord   =            99.40
Mid. Ord.    =             0.41
P.C.  Station            14+58.07  X       2,445,649.07  Y       7,048,521.82
P.T.  Station            15+57.48  X       2,445,564.52  Y       7,048,574.08
C.C.                               X       2,444,029.59  Y       7,045,996.49
Back         = N  57° 19''41" W
Ahead        = N  59° 13''36" W
Chord Bear   = N  58° 16''39" W

Course from PT XD-3 to PC XD-4 N 59° 13''36" W Dist 190.70

                              Curve Data
                             *----------*
Curve XD-4
P.I.  Station            19+23.09  X       2,445,250.39  Y       7,048,761.14
Delta        =        2° 30''18" (RT)
Degree       =        0° 42''58"
Tangent      =           174.91
Length       =           349.76
Radius       =         8,000.00
External     =             1.91
Long Chord   =           349.74
Mid. Ord.    =             1.91
P.C.  Station            17+48.18  X       2,445,400.67  Y       7,048,671.65
P.T.  Station            20+97.94  X       2,445,104.16  Y       7,048,857.12
C.C.                               X       2,449,493.82  Y       7,055,545.24
Back         = N  59° 13''36" W
Ahead        = N  56° 43''18" W
Chord Bear   = N  57° 58''27" W

                              Curve Data
                             *----------*
Curve XD-5
P.I.  Station            22+81.45  X       2,444,950.74  Y       7,048,957.81
Delta        =        1° 45''08" (LT)
Degree       =        0° 28''39"
Tangent      =           183.51
Length       =           366.99
Radius       =        12,000.00
External     =             1.40
Long Chord   =           366.98
Mid. Ord.    =             1.40
P.C.  Station            20+97.94  X       2,445,104.16  Y       7,048,857.12
P.T.  Station            24+64.93  X       2,444,794.32  Y       7,049,053.77
C.C.                               X       2,438,519.68  Y       7,038,824.94
Back         = N  56° 43''18" W
Ahead        = N  58° 28''26" W
Chord Bear   = N  57° 35''52" W

Course from PT XD-5 to 169 N 58° 28''26" W Dist 248.13

Point 169             X     2,444,582.81 Y     7,049,183.51 Sta      27+13.07

***************************************************************************
Ending chain RMP35NBN204 description
```

NB EXIT RAMPS

NB EXIT RAMP 2

```
Beginning chain RMP35NBX2 description
Description: Ramp AK
***************************************************************************

                              Curve Data
                             *----------*
Curve AK-1                  (Chord Definition)
P.I.  Station            10+94.91  X       2,458,362.44  Y       7,031,411.78
Delta        =        3°37''26" (RT)
Degree       =        1°54''36"
Tangent      =            94.91
Length       =           189.74
Radius       =         3,000.00
External     =             1.50
Long Chord   =           189.72
Mid. Ord.    =             1.50
P.C.  Station            10+00.00  X       2,458,404.41  Y       7,031,326.66
P.T.  Station            11+89.74  X       2,458,325.93  Y       7,031,499.39
C.C.                               X       2,461,095.04  Y       7,032,653.52
Back         = N  26°15''00" W
Ahead        = N  22°37''33" W
Chord Bear   = N  24°26''16" W

Course from PT AK-1 to PC AK-2 N 22°37''33" W Dist 132.51
                              Curve Data
                             *----------*
Curve AK-2                  (Chord Definition)
P.I.  Station            14+49.04  X       2,458,226.17  Y       7,031,738.73
Delta        =        9°03''40" (LT)
Degree       =        3°34''54"
Tangent      =           126.78
Length       =           252.99
Radius       =         1,600.00
External     =             5.02
Long Chord   =           252.77
Mid. Ord.    =             5.00
P.C.  Station            13+22.26  X       2,458,274.95  Y       7,031,621.70
P.T.  Station            15+75.25  X       2,458,159.58  Y       7,031,846.61
C.C.                               X       2,456,798.09  Y       7,031,006.16
Back         = N  22°37''33" W
Ahead        = N  31°41''13" W
Chord Bear   = N  27°09''23" W

***************************************************************************
Ending chain RMP35NBX2 description
```

NB EXIT RAMP 3

```
Beginning chain RMP35NBX3 description
Description: Ramp AM
***************************************************************************

                              Curve Data
                             *----------*
Curve AM-1
P.I.  Station            11+76.05  X       2,457,500.19  Y       7,032,789.34
Delta        =        6°43' 01" (RT)
Degree       =        1°54' 35"
Tangent      =           176.05
Length       =           351.69
Radius       =         3,000.00
External     =             5.16
Long Chord   =           351.49
Mid. Ord.    =             5.15
P.C.  Station            10+00.00  X       2,457,598.56  Y       7,032,643.34
P.T.  Station            13+51.69  X       2,457,419.58  Y       7,032,945.84
C.C.                               X       2,460,086.55  Y       7,034,319.61
Back         = N  33°58' 12" W
Ahead        = N  27°15' 11" W
Chord Bear   = N  30°36' 42" W

Course from PT AM-1 to PC AM-2 N 27°15' 11" W Dist 161.43

                              Curve Data
                             *----------*
Curve AM-2
P.I.  Station            16+15.27  X       2,457,298.88  Y       7,033,180.17
Delta        =        3°19' 49" (LT)
Degree       =        1°37' 50"
Tangent      =           102.15
Length       =           204.24
Radius       =         3,514.00
External     =             1.48
Long Chord   =           204.22
Mid. Ord.    =             1.48
P.C.  Station            15+13.12  X       2,457,345.66  Y       7,033,089.35
P.T.  Station            17+17.37  X       2,457,246.91  Y       7,033,268.11
C.C.                               X       2,454,221.74  Y       7,031,480.21
Back         = N  27°15' 11" W
Ahead        = N  30°35' 00" W
Chord Bear   = N  28°55' 06" W

                              Curve Data
                             *----------*
Curve AM-3
P.I.  Station            19+52.00  X       2,457,127.53  Y       7,033,470.10
Delta        =        2°05' 23" (RT)
Degree       =        0°26' 43"
Tangent      =           234.63
Length       =           469.21
Radius       =        12,865.00
External     =             2.14
Long Chord   =           469.18
Mid. Ord.    =             2.14
P.C.  Station            17+17.37  X       2,457,246.91  Y       7,033,268.11
P.T.  Station            21+86.57  X       2,457,015.60  Y       7,033,676.30
C.C.                               X       2,468,322.26  Y       7,039,813.70
Back         = N  30°35' 00" W
Ahead        = N  28°29' 37" W
Chord Bear   = N  29°32' 19" W

Course from PT AM-3 to PC AM-4 N 28°29' 37" W Dist 29.95

                              Curve Data
                             *----------*
Curve AM-4
P.I.  Station            22+60.92  X       2,456,980.13  Y       7,033,741.65
Delta        =        4°49' 10" (RT)
Degree       =        5°25' 51"
Tangent      =            44.40
Length       =            88.74
Radius       =         1,055.00
External     =             0.93
Long Chord   =            88.72
Mid. Ord.    =             0.93
P.C.  Station            22+16.52  X       2,457,001.31  Y       7,033,702.63
P.T.  Station            23+05.27  X       2,456,962.30  Y       7,033,782.31
C.C.                               X       2,457,928.52  Y       7,034,205.93
Back         = N  28°29' 37" W
Ahead        = N  23°40' 27" W
Chord Bear   = N  26°05' 02" W

                              Curve Data
                             *----------*
Curve AM-5
P.I.  Station            23+60.63  X       2,456,940.07  Y       7,033,833.01
Delta        =        2°06' 10" (LT)
Degree       =        1°53' 57"
Tangent      =            55.37
Length       =           110.72
Radius       =         3,016.80
External     =             0.51
Long Chord   =           110.71
Mid. Ord.    =             0.51
P.C.  Station            23+05.27  X       2,456,962.30  Y       7,033,782.31
P.T.  Station            24+15.99  X       2,456,915.99  Y       7,033,882.87
C.C.                               X       2,454,199.38  Y       7,032,570.96
Back         = N  23°40' 27" W
Ahead        = N  25°46' 37" W
Chord Bear   = N  24°43' 32" W

                              Curve Data
                             *----------*
Curve AM-6
P.I.  Station            25+32.91  X       2,456,865.15  Y       7,033,988.16
Delta        =        4°26' 42" (LT)
Degree       =        1°54' 07"
Tangent      =           116.92
Length       =           233.73
Radius       =         3,012.68
External     =             2.27
Long Chord   =           233.67
Mid. Ord.    =             2.27
P.C.  Station            24+15.99  X       2,456,915.99  Y       7,033,882.87
P.T.  Station            26+49.71  X       2,456,806.29  Y       7,034,089.19
C.C.                               X       2,454,203.09  Y       7,032,572.75
Back         = N  25°46' 37" W
Ahead        = N  30°13' 19" W
Chord Bear   = N  27°59' 58" W

***************************************************************************
Ending chain RMP35NBX3 description
```

NB EXIT RAMP 4

```
Beginning chain RMP35NBX4 description
Description: Ramp AN
***************************************************************************

                              Curve Data
                             *----------*
Curve AN-1
P.I.  Station            12+12.76  X       2,455,290.12  Y       7,036,502.00
Delta        =        8°06' 47" (RT)
Degree       =        1°54' 35"
Tangent      =           212.76
Length       =           424.80
Radius       =         3,000.00
External     =             7.53
Long Chord   =           424.45
Mid. Ord.    =             7.52
P.C.  Station            10+00.00  X       2,455,383.55  Y       7,036,310.85
P.T.  Station            14+24.80  X       2,455,224.61  Y       7,036,704.42
C.C.                               X       2,458,078.83  Y       7,037,628.22
Back         = N  26°02' 52" W
Ahead        = N  17°56' 05" W
Chord Bear   = N  21°59' 29" W

Course from PT AN-1 to PC AN-2 N 17°56' 05" W Dist 139.71

                              Curve Data
                             *----------*
Curve AN-2
P.I.  Station            16+39.19  X       2,455,158.59  Y       7,036,908.39
Delta        =        7°59' 35" (LT)
Degree       =        5°21' 39"
Tangent      =            74.67
Length       =           149.10
Radius       =         1,068.79
External     =             2.61
Long Chord   =           148.98
Mid. Ord.    =             2.60
P.C.  Station            15+64.52  X       2,455,181.58  Y       7,036,837.34
P.T.  Station            17+13.62  X       2,455,125.94  Y       7,036,975.54
C.C.                               X       2,454,164.73  Y       7,036,508.23
Back         = N  17°56' 05" W
Ahead        = N  25°55' 40" W
Chord Bear   = N  21°55' 52" W

***************************************************************************
Ending chain RMP35NBX4 description
```

NB EXIT RAMP 5

```
Beginning chain RMP35NBX5 description
Description: Ramp AP
**************************************************************************

                              Curve Data
                             *----------*
Curve AP-1
P.I.  Station          11+87.06  X       2,453,207.05  Y        7,040,820.39
Delta        =        7°08' 10" (RT)
Degree       =        1°54' 35"
Tangent      =            187.06
Length       =            373.64
Radius       =          3,000.00
External     =              5.83
Long Chord   =            373.40
Mid. Ord.    =              5.82
P.C.  Station          10+00.00  X       2,453,288.77  Y        7,040,652.12
P.T.  Station          13+73.64  X       2,453,146.87  Y        7,040,997.51
C.C.                             X       2,455,987.39  Y        7,041,962.61
Back         = N  25°54' 07" W
Ahead        = N  18°45' 57" W
Chord Bear   = N  22°20' 02" W

Course from PT AP-1 to PC AP-2 N 18°45' 57" W Dist 153.06

                              Curve Data
                             *----------*
Curve AP-2
P.I.  Station          15+92.97  X       2,453,076.31  Y        7,041,205.17
Delta        =        7°05' 39" (LT)
Degree       =        5°21' 35"
Tangent      =             66.26
Length       =            132.36
Radius       =          1,069.00
External     =              2.05
Long Chord   =            132.27
Mid. Ord.    =              2.05
P.C.  Station          15+26.70  X       2,453,097.63  Y        7,041,142.43
P.T.  Station          16+59.06  X       2,453,047.41  Y        7,041,264.80
C.C.                             X       2,452,085.46  Y        7,040,798.53
Back         = N  18°45' 57" W
Ahead        = N  25°51' 36" W
Chord Bear   = N  22°18' 47" W

**************************************************************************
Ending chain RMP35NBX5 description
```

NB EXIT RAMP 6

```
Beginning chain RMP35NBX6 description
Description: Ramp AQ
**************************************************************************

                              Curve Data
                             *----------*
Curve AQ-1
P.I.  Station          11+29.32  X       2,451,969.49  Y        7,042,901.05
Delta        =        8°51' 09" (RT)
Degree       =        5°25' 51"
Tangent      =             81.66
Length       =            163.00
Radius       =          1,055.00
External     =              3.16
Long Chord   =            162.84
Mid. Ord.    =              3.15
P.C.  Station          10+47.66  X       2,452,021.60  Y        7,042,838.18
P.T.  Station          12+10.66  X       2,451,927.67  Y        7,042,971.20
C.C.                             X       2,452,833.85  Y        7,043,511.44
Back         = N  39°39' 18" W
Ahead        = N  30°48' 09" W
Chord Bear   = N  35°13' 44" W

Course from PT AQ-1 to PC AQ-2 N 30°48' 09" W Dist 85.46

                              Curve Data
                             *----------*
Curve AQ-2
P.I.  Station          14+45.12  X       2,451,807.61  Y        7,043,172.58
Delta        =        8°27' 44" (LT)
Degree       =        2°50' 42"
Tangent      =            149.00
Length       =            297.45
Radius       =          2,014.00
External     =              5.50
Long Chord   =            297.18
Mid. Ord.    =              5.49
P.C.  Station          12+96.12  X       2,451,883.91  Y        7,043,044.60
P.T.  Station          15+93.57  X       2,451,713.31  Y        7,043,287.94
C.C.                             X       2,450,154.01  Y        7,042,013.27
Back         = N  30°48' 09" W
Ahead        = N  39°15' 53" W
Chord Bear   = N  35°02' 01" W

Course from PT AQ-2 to 153 N 39°15' 53" W Dist 629.60

Point 153            X     2,451,314.83 Y     7,043,775.39 Sta      22+23.17

**************************************************************************
Ending chain RMP35NBX6 description
```

NB EXIT RAMP 7

```
Beginning chain RMP35NBX7 description
Description: Ramp AR
**************************************************************************

                              Curve Data
                             *----------*
Curve AR-1
P.I.  Station          10+99.51  X       2,450,502.85  Y        7,044,536.54
Delta        =        3°47' 58" (RT)
Degree       =        1°54' 35"
Tangent      =             99.51
Length       =            198.94
Radius       =          3,000.00
External     =              1.65
Long Chord   =            198.91
Mid. Ord.    =              1.65
P.C.  Station          10+00.00  X       2,450,566.09  Y        7,044,459.72
P.T.  Station          11+98.94  X       2,450,444.84  Y        7,044,617.39
C.C.                             X       2,452,882.26  Y        7,046,366.38
Back         = N  39°27' 40" W
Ahead        = N  35°39' 41" W
Chord Bear   = N  37°33' 40" W

Course from PT AR-1 to PC AR-2 N 35°39' 41" W Dist 151.94

                              Curve Data
                             *----------*
Curve AR-2
P.I.  Station          14+55.81  X       2,450,295.08  Y        7,044,826.09
Delta        =        3°07' 36" (RT)
Degree       =        1°29' 25"
Tangent      =            104.94
Length       =            209.82
Radius       =          3,844.79
External     =              1.43
Long Chord   =            209.79
Mid. Ord.    =              1.43
P.C.  Station          13+50.88  X       2,450,356.26  Y        7,044,740.84
P.T.  Station          15+60.70  X       2,450,238.65  Y        7,044,914.56
C.C.                             X       2,453,480.06  Y        7,046,982.33
Back         = N  35°39' 41" W
Ahead        = N  32°32' 05" W
Chord Bear   = N  34°05' 53" W

**************************************************************************
Ending chain RMP35NBX7 description
```

NB EXIT RAMP 8

```
Beginning chain RMP35NBX8 description
Description: Ramp AS
**************************************************************************

                              Curve Data
                             *----------*
Curve AS-1
P.I.  Station          11+37.04  X       2,447,857.43  Y        7,046,999.87
Delta        =        5°13' 52" (RT)
Degree       =        1°54' 35"
Tangent      =            137.04
Length       =            273.90
Radius       =          3,000.00
External     =              3.13
Long Chord   =            273.80
Mid. Ord.    =              3.13
P.C.  Station          10+00.00  X       2,447,972.79  Y        7,046,925.89
P.T.  Station          12+73.90  X       2,447,749.30  Y        7,047,084.06
C.C.                             X       2,449,592.27  Y        7,049,451.22
Back         = N  57°19' 41" W
Ahead        = N  52°05' 49" W
Chord Bear   = N  54°42' 45" W

                              Curve Data
                             *----------*
Curve AS-2
P.I.  Station          14+33.23  X       2,447,623.58  Y        7,047,181.94
Delta        =        6°04' 49" (LT)
Degree       =        1°54' 35"
Tangent      =            159.33
Length       =            318.36
Radius       =          3,000.00
External     =              4.23
Long Chord   =            318.21
Mid. Ord.    =              4.22
P.C.  Station          12+73.90  X       2,447,749.30  Y        7,047,084.06
P.T.  Station          15+92.26  X       2,447,488.20  Y        7,047,265.96
C.C.                             X       2,445,906.32  Y        7,044,716.91
Back         = N  52°05' 49" W
Ahead        = N  58°10' 38" W
Chord Bear   = N  55°08' 14" W

**************************************************************************
Ending chain RMP35NBX8 description
```

Texas Department of Transportation ®

DALLAS DISTRICT

DRAFT INTERIM SCHEMATIC

WILLIAM L. HALE, P.E., DISTRICT ENGINEER

INTERSTATE TEXAS 35E

IH 35E

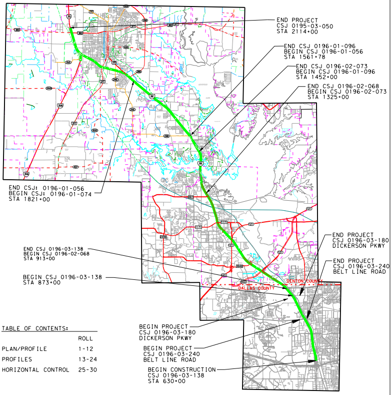
FROM: IH 635
TO: US 380

DALLAS & DENTON COUNTY

FUNCTIONAL CLASS: URBAN FREEWAY
PROJECT LENGTH: 28.25 MILES

CSJ's:
0196-03-138
0196-03-240
0196-03-180
0196-03-245
0196-02-068
0196-02-073
0196-01-096
0196-01-056
0196-01-074
0195-03-050
0195-03-071

DESIGN SPEEDS:
MAINLANES 70 MPH
MANAGED LANES 70 MPH
RAMPS 40 MPH
TURNAROUND RAMPS 20 MPH
FRONTAGE ROADS 40 MPH
CROSS STREETS 30 MPH
COLLECTOR DISTRIBUTOR 50 MPH
DIRECT CONNECTORS 50 MPH
INTERSECTIONS 30 MPH



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SCALE:
HORIZONTAL 1"=200'
VERTICAL 1"=20'

1/11/2013

ROLL 27 OF 30

SCHEMATIC PREPARED BY:

FOR INTERIM REVIEW ONLY
NOT FOR PERMITTING, BIDDING
OR CONSTRUCTION.
Prepared by or under the
Direct Supervision of:

SHAWN BRENT STOVER 109251
NAME P.E. NUMBER

1/11/2013
DATE

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